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# ENVIRONMENTAL ASSESSMENT

## CONSTRUCTION OF AN ARMED FORCES RESERVE CENTER COMPLEX AND IMPLEMENTATION OF BRAC 05 REALIGNMENT ACTIONS IN NIAGARA FALLS, NEW YORK



**July 2007**

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*prepared for*

**Niagara Falls Air Reserve Station, NY**

*prepared by*

**U.S. Army Corps of Engineers**

Mobile District

P.O. Box 2288

Mobile, AL 36628

Report Documentation Page			Form Approved OMB No. 0704-0188		
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1. REPORT DATE <b>JUL 2007</b>		2. REPORT TYPE		3. DATES COVERED <b>00-00-2007 to 00-00-2007</b>	
4. TITLE AND SUBTITLE <b>Environmental Assessment for Construction of an Armed Forces Reserve Center Complex and Implementation of BRAC 05 Realignment Actions in Niagara Falls, New York</b>			5a. CONTRACT NUMBER		
			5b. GRANT NUMBER		
			5c. PROGRAM ELEMENT NUMBER		
6. AUTHOR(S)			5d. PROJECT NUMBER		
			5e. TASK NUMBER		
			5f. WORK UNIT NUMBER		
7. PERFORMING ORGANIZATION NAME(S) AND ADDRESS(ES) <b>U.S. Army Corps of Engineers, Mobile District, PO Box 2288, Mobile, AL, 36628</b>			8. PERFORMING ORGANIZATION REPORT NUMBER		
9. SPONSORING/MONITORING AGENCY NAME(S) AND ADDRESS(ES)			10. SPONSOR/MONITOR'S ACRONYM(S)		
			11. SPONSOR/MONITOR'S REPORT NUMBER(S)		
12. DISTRIBUTION/AVAILABILITY STATEMENT <b>Approved for public release; distribution unlimited</b>					
13. SUPPLEMENTARY NOTES					
14. ABSTRACT <b>On September 8, 2005, the Defense Base Closure and Realignment Commission ("BRAC Commission") recommended that certain realignment actions occur in Niagara Falls, New York. These recommendations were approved by the President on September 23, 2005, and forwarded to Congress. The Congress did not alter any of the BRAC Commission's recommendations, and on November 9, 2005, the recommendations became law. The BRAC Commission's recommendations must now be implemented as provided for in the Defense Base Closure and Realignment Act of 1990 (Public Law 101-51 0), as amended. To implement the BRAC Commission's recommendations, the U.S. Army proposes to provide the necessary facilities to support the changes in force structure and the consolidation of reserve units. This Environmental Assessment (EA) analyzes and documents environmental effects associated with the U.S. Army's proposed actions at Niagara Falls, NY. None of the predicted effects of the Proposed Action would result in significant impacts to the quality of the human or biological environment at Niagara Falls ARS. Moreover, mitigation would not be necessary to offset impacts. Therefore, preparation of an Environmental Impact Statement is not required and a Finding of No Significant Impact (FONSI)1 will be published in accordance with the National Environmental Policy Act.</b>					
15. SUBJECT TERMS					
16. SECURITY CLASSIFICATION OF:			17. LIMITATION OF ABSTRACT <b>Same as Report (SAR)</b>	18. NUMBER OF PAGES <b>178</b>	19a. NAME OF RESPONSIBLE PERSON
a. REPORT <b>unclassified</b>	b. ABSTRACT <b>unclassified</b>	c. THIS PAGE <b>unclassified</b>			







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## CONSTRUCTION OF AN ARMED FORCES RESERVE CENTER COMPLEX AND IMPLEMENTATION OF BRAC 05 REALIGNMENT ACTIONS IN NIAGARA FALLS, NEW YORK



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Niagara Falls Air Reserve Station, NY

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## **FINDING OF NO SIGNIFICANT IMPACT**

### **CONSTRUCTION OF AN ARMED FORCES RESERVE CENTER COMPLEX AND IMPLEMENTATION OF BRAC 05 REALIGNMENT ACTIONS IN NIAGARA FALLS, NEW YORK**

On September 8, 2005, the Defense Base Closure and Realignment Commission ("BRAC Commission") recommended that certain realignment actions occur in Niagara Falls, New York. These recommendations were approved by the President on September 23, 2005, and forwarded to Congress. Congress did not alter any of the BRAC Commission's recommendations, and on November 9, 2005, the recommendations became law. The BRAC Commission's recommendations must now be implemented as provided for in the Defense Base Closure and Realignment Act of 1990 (Public Law 101-510), as amended.

The U.S. Army Corps of Engineers, Mobile District, has prepared an Environmental Assessment (EA) which identifies, documents, and evaluates the environmental effects of the BRAC Commission's recommended realignment of reserve functions in Niagara Falls, NY. The EA has been developed in accordance with the National Environmental Policy Act of 1969 (42 U.S.C. 4321 et seq.) and implementing regulations issued by the President's Council on Environmental Quality (CEQ).<sup>1</sup> The 2006 Base Realignment Closure Manual for Compliance with the National Environmental Policy Act was used for guidance in preparing the EA. The purpose of the EA is to inform decision makers and the public of the likely environmental consequences of the proposed action and alternatives.

#### **1.0 PROPOSED ACTION**

The proposed action is to implement the BRAC Commission's recommendation, as mandated by BRAC law, Public Law 101-510, by constructing new facilities to accommodate the personnel and functions of organizations realigning and relocating in Niagara Falls, NY

Specific BRAC Commission recommendations include:<sup>2</sup>

- Close the United States Army Reserve Center [USARC] and Army Maintenance Support Activity, Niagara Falls, NY and construct a new Armed Forces Reserve Center [AFRC] on the existing site or on the former Niagara Falls Air Reserve Station [ARS], if a suitable site is available, in Niagara Falls, NY. The new AFRC shall have the capability to accommodate the NY National Guard [NYARNG] units from the Niagara Falls Readiness Center, if the state of New York decides to relocate those National Guard units.

To implement these recommendations, the following new facilities are proposed for construction at the Niagara Falls ARS:

**Armed Forces Reserve Center Complex and supporting facilities.** The AFRC would provide a 600-member training facility with administrative, educational, assembly, library, learning center, vault, and weapons simulator areas for 12 U.S. Army Reserve units and one NYARNG unit. The AFRC would be approximately 71,720 square feet (ft<sup>2</sup>) in size. Associated support facilities include an approximately 17,476 ft<sup>2</sup> Organizational Maintenance Shop (OMS)/Area Maintenance Support Activity (AMSA), an approximately 4,886 ft<sup>2</sup> unheated storage building, and a Deployable Medical System (DEPMEDS). The DEPMEDS would consist of an approximately 1-acre site with a gravel surface, fencing, lighting, and electrical outlets. The AFRC complex would also include approximately 22,167 square yards (sy) of paved areas including military equipment parking (MEP) areas, privately-owned vehicle (POV) parking areas, and access roads.

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<sup>1</sup> Council on Environmental Quality Regulations for Implementing the Procedural Provisions of the National Environmental Policy Act, 40 CFR Parts 1500–1508; Environmental Analysis of Army Actions, 32 CFR Part 651; and the U.S. Air Force equivalent, The Environmental Impact Analysis Process, 32 CFR 989.

<sup>2</sup> The BRAC Commission's original recommendation stipulated that the AFRC be constructed on the existing USARC site. However, the BRAC Commission subsequently revised their recommendation and included the Niagara Falls ARS as a potential construction site to reflect the continuing availability of the ARS which had previously been recommended for closure.

Anti-terrorism/Force Protection (AT/FP) safety and security measures, including minimum stand-off distance from roads, parking areas and vehicle unloading areas, would be incorporated into the facility designs and siting, and accessibility for disabled persons would also be provided.

## **2.0 ALTERNATIVES CONSIDERED**

CEQ regulations require inclusion of the No Action Alternative. The No Action Alternative serves as a baseline against which the impacts of the Proposed Action and alternatives can be evaluated. Under the No Action Alternative, The U.S. Army would not implement the Proposed Action. Units presently assigned to the Niagara Falls USARC would continue to train at and operate from their existing facilities and no new facilities would be built at Niagara Falls ARS. The No Action Alternative is evaluated in detail in this EA to provide the baseline prescribed by CEQ regulations; nevertheless, since Public Law 101-510, as amended, mandates implementation of the BRAC Commission's recommendations, the No Action Alternative analyzed in the EA cannot be selected and subsequently implemented.

The U.S. Army considered and analyzed one other alternative, the "Preferred" Alternative. Under the Preferred Alternative, the facilities would be constructed at the Niagara Falls ARS as described in the Proposed Action.

Other alternatives were considered, but not analyzed in the EA. These included (1) use of existing facilities at Niagara Falls USARC or Niagara Falls ARS, (2) new construction at the Niagara Falls USARC, (3) acquisition of new property; (3) leasing existing space off-base; and (4) new construction in locations other than those identified in the Preferred Alternative. These other alternatives were considered not feasible to implement the Proposed Action and were therefore dismissed from further analysis.

## **3.0 FACTORS CONSIDERED IN DETERMINING THAT AN ENVIRONMENTAL IMPACT STATEMENT IS NOT REQUIRED**

The EA, which is incorporated by reference into this Finding of No Significant Impact (FONSI), identified and examined potential effects of the alternatives. The EA evaluated 12 resource areas and areas of environmental and socioeconomic concern: land use, aesthetic and visual resources, air quality, noise, geology and soils, water resources, biological resources, cultural resources, socioeconomics (including environmental justice), transportation, utilities, and hazardous and toxic substances.

The EA determined that implementation of the proposed realignment actions would not have any significant adverse effects or impacts on any of the environmental or related resource areas at Niagara Falls ARS or on areas surrounding the installation. Potential effects associated with implementation of the realignment (preferred) alternative are expected to be negligible or minor. These impacts would be experienced in the following areas: land use, visual, air quality, noise, soils, water resources, biological resources, socioeconomics, transportation, utilities, hazardous materials, cumulative effects, and irreversible and irretrievable commitment of resources.

None of the predicted effects of the proposed realignment actions would result in significant impacts; therefore, mitigation is not required, and implementation of the Proposed Action will not require the preparation of an Environmental Impact Statement. Therefore, preparation of a FONSI is appropriate.

## **4.0 PUBLIC COMMENT**

Interested parties were invited to review and comment on the EA and Draft FONSI from September 12, 2007 through October 11, 2007 and a Notice of Availability was published on September 12 and 13, 2007 in the *Niagara Gazette* newspaper.

The EA and Draft FONSI were made available during the public comment period on the World Wide Web at:

[http://www.hqda.army.mil/acsim/brac/env\\_review.htm](http://www.hqda.army.mil/acsim/brac/env_review.htm)

The EA and Draft FONSI were also available for review during the public comment period at the following library:

Niagara Falls Public Library  
1425 Main Street  
Niagara Falls, NY 14305

Reviewers were invited to submit comments on the EA and Draft FONSI during the public comment period via mail, fax, or electronic mail to:

914th AW Office of Public Affairs  
2720 Kirkbridge Drive  
Niagara Falls ARS, NY 14304-5001  
Fax: (716) 236-3268  
Email: 914AW/PA@niagarafalls.af.mil

No comments were received on the EA or Draft FONSI during the 30-day comment period.

## 5.0 CONCLUSION

Based on the EA, it has been determined that implementation of the Proposed Action will have no significant direct, indirect, or cumulative adverse effects on the quality of the natural or human environment. Because no significant environmental impacts will result from implementation of the Proposed Action, an Environmental Impact Statement is not required and will not be prepared.

Date: 20 Nov 07



REINHARD L. SCHMIDT  
Colonel, U.S. Air Force Reserve  
914th Air Wing  
Commander

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**ENVIRONMENTAL ASSESSMENT**

**CONSTRUCTION OF AN ARMED FORCES RESERVE CENTER  
COMPLEX AND IMPLEMENTATION OF BRAC 05 REALIGNMENT  
ACTIONS IN NIAGARA FALLS, NY**

*Prepared by:*

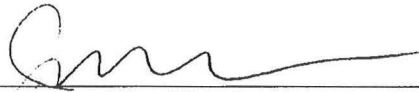
U.S. ARMY CORPS OF ENGINEERS  
MOBILE DISTRICT



Byron G. Jorns  
Colonel, Engineer  
Commanding

*Approved by:*

77th Regional Readiness Command



John Wohrle  
Facility Management Office

and

914th Airlift Wing



REINHARD L. SCHMIDT, Col, USAFR  
Commander

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## ENVIRONMENTAL ASSESSMENT

**LEAD AGENCY:** Mobile District, U.S. Army Corps of Engineers

**TITLE OF PROPOSED ACTION:** Environmental Assessment for Construction of an Armed Forces Reserve Center Complex and Implementation of BRAC 05 Realignment Actions in Niagara Falls, New York

**AFFECTED JURISDICTIONS:** Niagara County, New York

**PREPARED BY:** Curtis M. Flakes, U.S. Army Corps of Engineers, Mobile District, Chief of Planning and Environmental Division

**APPROVED BY:** John Wohrle, 77th Regional Readiness Command, Facility Management Office and Reinhard L. Schmidt, Colonel, U.S. Air Force Reserve, 914th Airlift Wing, Commanding

**ABSTRACT:** On September 8, 2005, the Defense Base Closure and Realignment Commission ("BRAC Commission") recommended that certain realignment actions occur in Niagara Falls, New York. These recommendations were approved by the President on September 23, 2005, and forwarded to Congress. The Congress did not alter any of the BRAC Commission's recommendations, and on November 9, 2005, the recommendations became law. The BRAC Commission's recommendations must now be implemented as provided for in the Defense Base Closure and Realignment Act of 1990 (Public Law 101-510), as amended.

To implement the BRAC Commission's recommendations, the U.S. Army proposes to provide the necessary facilities to support the changes in force structure and the consolidation of reserve units. This Environmental Assessment (EA) analyzes and documents environmental effects associated with the U.S. Army's proposed actions at Niagara Falls, NY.

None of the predicted effects of the Proposed Action would result in significant impacts to the quality of the human or biological environment at Niagara Falls ARS. Moreover, mitigation would not be necessary to offset impacts. Therefore, preparation of an Environmental Impact Statement is not required and a Finding of No Significant Impact (FONSI)<sup>1</sup> will be published in accordance with the National Environmental Policy Act.

**REVIEW PERIOD:** Interested parties are invited to review and comment on the EA and Draft FONSI during the 30 day comment period, September 12, 2007 through October 11, 2007. The EA and Draft FONSI can be accessed on the World Wide Web at:

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<sup>1</sup> Finding of No Significant Impact is abbreviated FNSI by the U.S. Army and FONSI by the U.S. Air Force. Because the Finding of No Significant Impact would be signed by the U.S. Air Force Reserve, FONSI will be used throughout this EA.

[http://www.hqda.army.mil/acsim/brac/env\\_ea\\_review.htm](http://www.hqda.army.mil/acsim/brac/env_ea_review.htm)

Copies of the EA can also be viewed at the following local library:

Niagara Falls Public Library

1425 Main St

Niagara Falls, NY 14305

Comments on the EA and Draft FONSI should be submitted during the 30-day public comment period via mail, fax, or electronic mail to the following:

914th AW Office of Public Affairs

2720 Kirkbridge Drive

Niagara Falls ARS, NY 14304-5001

Fax: (716) 236-3268

Email: 914AW/PA@niagarafalls.af.mil

STATE OF NEW YORK

NIAGARA COUNTY, } SS, \_\_\_\_\_

Allyson Millette, of said county, being duly sworn, deposes and says that she is now and during the whole time hereinafter mentioned was the Legal Clerk of

The Niagara Gazette

A newspaper published in the County and State aforesaid, and that the annexed printed legal # 05533861 was printed and published in said paper at least Twice a week for one successive weeks, commencing on the 12th day of September and ending on the 13th day of September, 2007.

Allyson Millette

Principal Clerk

Subscribed and sworn to me before this 22nd day of September, 2007

Teresa L. McCarthy

Notary Public

Expiration Date

Teresa L. McCarthy  
Notary Public, State of New York  
No. 01MC4962698  
Qualified in Niagara County  
Commission Expires Feb. 26, 2010

**PUBLIC NOTICE OF AVAILABILITY  
ENVIRONMENTAL ASSESSMENT AND  
DRAFT FINDING OF NO SIGNIFICANT  
IMPACT FOR THE CONSTRUCTION OF  
AN ARMED FORCES RESERVE CENTER  
COMPLEX AND IMPLEMENTATION OF  
BRAC 2005 REALIGNMENT ACTIONS IN  
NIAGARA FALLS, NEW YORK**

Pursuant to the Council on Environmental Quality regulations for implementing the procedural provisions of the National Environmental Policy Act (40 CFR 1500), 32 CFR 989 Environmental Impact Analysis Process, and 32 CFR 651 Environmental Analysis of Army Actions, the U.S. Army conducted an Environmental Assessment (EA) of the potential environmental and socioeconomic effects associated with implementing the Defense Base Closure and Realignment (BRAC) Commission's recommendations for the U.S. Army Reserve Center in Niagara Falls, New York. The new facilities included in the Proposed Action implementing the BRAC Commission's recommendations are proposed to be constructed at the Niagara Falls Air Reserve Station (ARS) and include:

- Armed Forces Reserve Center (AFRC) and supporting facilities. The AFRC would provide a 600-member training facility with administrative, educational, assembly, library, learning center, vault, and weapons simulator areas for 12 U.S. Army Reserve units and one NYARNG unit. The AFRC would be approximately 71,720 square feet (ft<sup>2</sup>) in size. Associated support facilities include an approximately 17,476 ft<sup>2</sup> Organizational Maintenance Shop (OMS)/Area Maintenance Support Activity (AMSA), an approximately 4,886 ft<sup>2</sup> unheated storage building, and a Deployable Medical System (DEPMEDS). The DEPMEDS would consist of an approximately 1-acre site with a gravel surface, fencing, lighting, and electrical outlets. The AFRC complex would also include approximately 22,167 square yards (sy) of paved areas including military equipment parking (MEP) areas, privately-owned vehicle (POV) parking areas, and access roads.

The EA and Draft Finding of No Significant Impact (FONSI) will undergo a 30-day public comment period, from September 12, 2007 through October 11, 2007. This is in accordance with requirements specified in 32 CFR 989.15 Environmental Impact Analysis Process and 32 CFR Part 651.14 Environmental Analysis of Army Actions. During this period the public may submit comments on the proposed action, the EA and the Draft FONSI.

The EA and Draft FONSI can be accessed on the World Wide Web at:  
[http://www.hqda.army.mil/acsim/brac/env\\_ea\\_review.htm](http://www.hqda.army.mil/acsim/brac/env_ea_review.htm)

Printed copies of the EA and Draft FONSI can also be viewed at the Niagara Falls Public Library, 1425 Main Street, Niagara Falls, NY 14305.

Comments on the EA and Draft FONSI should be submitted during the 30-day public comment period via mail, fax, or electronic mail to the Niagara Falls ARS Public Affairs Office at:

914th AW Office of Public Affairs  
2720 Kirkbridge Drive  
Niagara Falls, NY 14304-5001  
Fax: (716) 236-3268  
Email: [914AW/PA@niagarafalls.af.mil](mailto:914AW/PA@niagarafalls.af.mil)









## EXECUTIVE SUMMARY

### ES.1 INTRODUCTION

On September 8, 2005, the Base Closure and Realignment (BRAC) Commission recommended that certain realignment actions occur at Niagara Falls, NY. These recommendations were approved by the President on September 23, 2005, and forwarded to Congress. The Congress did not alter any of the BRAC Commission's recommendations, and on November 9, 2005, the recommendations became law. The BRAC Commission's recommendations must now be implemented as provided for in the Defense Closure and Realignment Act of 1990 (Public Law 101-510), as amended.

The following provides the BRAC Commission's recommendations for Niagara Falls U.S. Army Reserve Center (USARC) in Niagara Falls, NY (BRAC Commission, 2005):<sup>2</sup>

- Close the United States Army Reserve Center [USARC] and Army Maintenance Support Activity, Niagara Falls, NY and construct a new Armed Forces Reserve Center [AFRC] on the existing site or on the former Niagara Falls Air Reserve Station [ARS], if a suitable site is available, in Niagara Falls, NY. The new AFRC shall have the capability to accommodate the NY National Guard units from the Niagara Falls Readiness Center, if the state of New York decides to relocate those National Guard units.

To implement this recommendation, the U.S. Army proposes to construct a new AFRC and related facilities at Niagara Falls, NY to support the changes in force structure. This EA analyzes the potential environmental impacts associated with the U.S. Army's Proposed Action in Niagara Falls, NY.

The BRAC law exempts consideration of the need for the action or alternative installations in preparing environmental documentation pursuant to the National Environmental Policy Act (NEPA). However, an appropriate level of NEPA analysis and documentation is required to analyze how the BRAC actions will be implemented. Table ES-1 lists major environmental statutes, regulations, and Executive Orders applicable to federal projects.

### ES.2 BACKGROUND AND SETTING

The Niagara Falls ARS is located in northwest corner of New York State, approximately 6 miles east of Niagara Falls, NY in Niagara County.

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<sup>2</sup> The BRAC Commission's original recommendation stipulated that the AFRC be constructed on the existing USARC site. However, the BRAC Commission subsequently revised their recommendation and included the Niagara Falls ARS as a potential construction site to reflect the continuing availability of the ARS which had previously been recommended for closure.

**Table ES-1. Major Environmental Statutes, Regulations, and  
Executive Orders Applicable to Federal Projects**

Environmental Resources	Statute, Regulation, or Executive Order
Air	Clean Air Act (CAA) of 1970 (PL 95-95), as amended in 1977 and 1990 (PL 91-604); U.S. Environmental Protection Agency (U.S. EPA), Subchapter C-Air Programs (40 CFR 52-99)
Noise	Noise Control Act of 1972 (PL 92-574) and Amendments of 1978 (PL 95-609); U.S. EPA, Subchapter G-Noise Abatement Programs (40 CFR 201-211)
Water	Federal Water Pollution Control Act (FWPCA) of 1972 (PL 92-500) and Amendments; Clean Water Act (CWA) of 1977 (PL 95-217); U.S. EPA, Subchapter D-Water Programs (40 CFR 100-145); Water Quality Act of 1987 (PL 100-4); U.S. EPA, Subchapter N-Effluent Guidelines and Standards (40 CFR 401-471); Safe Drinking Water Act (SDWA) of 1972 (PL 95-923) and Amendments of 1986 (PL 99-339); U.S. EPA, National Drinking Water Regulations and Underground Injection Control Program (40 CFR 141-149)
Biological Resources	Migratory Bird Treaty Act of 1918; Fish and Wildlife Coordination Act of 1958 (PL 85-654); Sikes Act of 1960 (PL 86-97) and Amendments of 1986 (PL 99-561) and 1997 (PL 105-85 Title XXIX); Endangered Species Act of 1973 (PL 93-205) and Amendments of 1988 (PL 100-478); Fish and Wildlife Conservation Act of 1980 (PL 96-366); Lacey Act Amendments of 1981 (PL 97-79); Responsibilities of Federal Agencies to Protect Migratory Birds (EO 13186)
Wetlands and Floodplains	Section 401 and 404 of the Federal Water Pollution Control Act of 1972 (PL 92-500); U.S. EPA, Subchapter D-Water Programs 40 CFR 100-149 (105 ref); Floodplain Management-1977 (EO 11988); Protection of Wetlands-1977 (EO 11990); Emergency Wetlands Resources Act of 1986 (PL 99-645); North American Wetlands Conservation Act of 1989 (PL 101-233)
Cultural Resources	NHPA (16 USC 470 et seq.) (PL 89-865) and Amendments of 1980 (PL 96-515) and 1992 (PL 102-575); Protection and Enhancement of the Cultural Environment-1971 (EO 11593); Indian Sacred Sites-1966 (EO 13007); American Indian Religious Freedom Act (AIRFA) of 1978 (PL 94-341); Antiquities Act of 1906; Archaeological Resources Protection Act (ARPA) of 1979 (PL 96-95); Native American Graves Protection and Repatriation Act (NAGPRA) of 1990 (PL 101-601); Protection of Historic and Cultural Properties (36 CFR 800)
Solid/Hazardous Materials and Waste	Resource Conservation and Recovery Act (RCRA) of 1976 (PL 94-5800), as Amended by PL 100-582; U.S. EPA, subchapter I-Solid Wastes (40 CFR 240-280); Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) of 1980 (42 USC 9601) (PL 96-510); Toxic Substances Control Act (TSCA) (PL 94-496); U.S. EPA, Subchapter R-Toxic Substances Control Act (40 CFR 702-799); Federal Insecticide, Fungicide, and Rodenticide Control Act (40 CFR 162-180); Emergency Planning and Community Right-to-Know Act (40 CFR 355, 370, and 372); Federal Compliance with Pollution Control Standards-1978 (EO 12088), Superfund Implementation (EO 12580); Strengthening Federal Environmental, Energy, and Transportation Management (EO 13423)
Health and Safety	Occupational Health and Safety Act of 1970 (29 CFR 1910 and 29 CFR 1926)
Environmental Justice	Federal Action to Address Environmental Justice in Minority Populations and Low-Income Populations (EO 12898); Protection of Children from Environmental Health Risks and Safety Risks (EO 13045)

### ES.3 PROPOSED ACTION

The Proposed Action is to construct a new AFRC and associated facilities to support U.S. Army Reserve units and a NY Army National Guard (NYARNG) unit relocating from the local Niagara Falls area. The purpose of the Proposed Action is to implement the BRAC Commission's recommendations pertaining to Niagara Falls, NY.

**Facilities** - The proposed AFRC would provide a 600-member training facility with administrative, educational, assembly, library, learning center, vault, and weapons simulator areas for 12 U.S. Army Reserve units and one NY Army National Guard unit. Associated support facilities include an Organizational Maintenance Shop (OMS)/Area Maintenance Support Activity (AMSA), a Deployable Medical System (DEPMEDS), an unheated storage building, a military equipment parking (MEP) area, and privately-owned vehicle (POV) parking areas.

**Equipment** - The relocation and realignment of reserve units to the proposed AFRC would also bring associated unit vehicles, equipment, and materials. The total number of vehicles that would relocate is projected to be approximately 202, including 91 wheeled vehicles, 109 trailers, and 2 tracked vehicles.

**Personnel** - Implementing the BRAC Commission's recommendations for Niagara Falls would result in the total assignment of approximately 586 workforce personnel to the new AFRC, 541 of whom are reservists and 45 of whom are full-time personnel.

### ES.4 REALIGNMENT PROCESS

The timeline for implementing the action at Niagara Falls ARS began in late 2005 with Congressional and Presidential approval of the BRAC law followed by the initiation of this NEPA process and related planning activities at Niagara Falls ARS. New BRAC facilities at Niagara Falls ARS are programmed through fiscal year 2010 with realignment moves scheduled to occur by 2011. Under the BRAC law, the U.S. Army must initiate all realignments not later than September 15, 2007, and complete all realignments not later than September 15, 2011.<sup>3</sup> This BRAC EA examines the environmental impact from efforts that will take place within the 6-year BRAC implementation window.

### ES.5 ALTERNATIVES

#### No Action Alternative

Under the No Action Alternative, the U.S. Army would not implement the Proposed Action. No units would relocate from other locations and no new facilities would be constructed in support of this BRAC action. U.S. Army

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<sup>3</sup> Section 2904(a), Public Law 101-510, as amended, provides that the Army must "... initiate all closures and realignments no later than two years after the date on which the President transmits a report [by the BRAC Commission] to the Congress ... containing the recommendations for such closures or realignments; and ... complete all such closures and realignments no later than the end of the six year period beginning on the date on which the President transmits the report ..." The President took the specified action on September 15, 2005.

Reserve units at the existing Niagara Falls USARC and the NYARNG unit would continue use of their current inventory of facilities, though routine replacement or renovation actions could occur, through normal military maintenance and construction procedures, as circumstances independently warrant. Implementation of this alternative is not possible due to the BRAC Commission's recommendations having the force of law. However, inclusion of the No Action Alternative is required by Council on Environmental Quality (CEQ) regulations and serves as a baseline against which the impacts of the Proposed Action and alternatives can be evaluated. Accordingly, the No Action Alternative is evaluated in this EA.

### **Preferred Alternative**

The preferred site is located in the northwest portion of the Niagara Falls ARS near the Tuscarora Gate. This site consists of approximately 18 undeveloped acres and can support the size and footprint of the proposed AFRC, OMS/AMSA, MEP area and other associated facilities, while also meeting current AT/FP stand-off requirements. Constructing the proposed AFRC complex at this site would consolidate three separate military installations (Niagara Falls USARC, NYARNG, and Niagara Falls ARS) into a single contiguous base; increasing the efficiency of command and control, allowing for joint use of support facilities (e.g. dining facilities), and significantly reducing overall operating costs. Closing the existing Niagara Falls USARC would also allow the U.S. Army to excess this parcel of land, thereby reducing its inventory of property and cutting costs. The USARC property would then be available for local economic redevelopment, thereby benefiting both the local and regional areas. Prior to disposal of the USARC property, separate NEPA compliance documentation would be prepared to address any issues related to the potential excessing of the buildings and/or property.

## **ES.6 ENVIRONMENTAL CONSEQUENCES**

Under the No Action Alternative, the proposed new BRAC facilities would not be constructed, and no environmental impacts would occur.

Under the Preferred Alternative, the Proposed Action would not have any significant adverse effects or impacts on any of the environmental or related resource areas at Niagara Falls ARS or to areas surrounding the ARS. For all resource areas, the effects are evaluated to be at the None, Negligible, or Minor levels, all of which equate to less than significant adverse impacts. Negligible effects are those that would be at or below the level of detection and Minor effects are those that would be detectable/measurable, but small and localized in nature.

A summary of impacts by resource area for the No Action Alternative and the Preferred Alternative is provided in Table ES-2.

**Table ES-2. Summary of the Impacts of the Proposed Action Alternatives**

<b>Resource</b>	<b>No Action Alternative</b>	<b>Preferred Alternative</b>
<b>Land Use</b>		
<i>Regional Geographic Setting and Location</i>	None. No Significant Impact	None. No Significant Impact.
<i>Installation Land</i>	None. No Significant Impact.	Negligible to minor. No Significant Impact.
<i>Surrounding Land</i>	None. No Significant Impact.	None. No Significant Impact.
<i>State Coastal Management Program</i>	None. No Significant Impact.	None. No Significant Impact.
<i>Current and Future Development in the Region of Influence</i>	None. No Significant Impact.	None. No Significant Impact.
<b>Aesthetic and Visual Resources</b>	None. No Significant Impact.	Negligible Adverse. No Significant Impact.
<b>Air Quality</b>		
<i>Ambient Air Quality Conditions</i>	None. No Significant Impact.	Negligible Adverse. No Significant Impact.
<i>Air Pollutant Emissions at Installation</i>	None. No Significant Impact.	Negligible Adverse. No Significant Impact.
<i>Regional Air Pollutant Emissions Summary</i>	None. No Significant Impact.	Negligible Adverse. No Significant Impact.
<b>Noise</b>	None. No Significant Impact.	Minor Adverse short-term impacts due to construction activities. No Significant Impact.
<b>Geology and Soils</b>		
<i>Geologic and Topographic Conditions</i>	None. No Significant Impact.	None. No Significant Impact.
<i>Soils</i>	None. No Significant Impact.	Minor Adverse. No Significant Impact.
<i>Prime Farmland</i>	None. No Significant Impact.	None. No Significant Impact.
<b>Water Resources</b>		
<i>Surface Water</i>	None. No Significant Impact.	Minor Adverse. No Significant Impact.
<i>Hydrogeology/Groundwater</i>	None. No Significant Impact.	Negligible Adverse. No Significant Impact.
<i>Floodplains</i>	None. No Significant Impact.	None. No Significant Impact.
<b>Biological Resources</b>		
<i>Vegetation</i>	None. No Significant Impact.	Negligible Adverse. No Significant Impact.
<i>Wildlife</i>	None. No Significant Impact.	Negligible Adverse. No Significant Impact.
<i>Sensitive Species</i>	None. No Significant Impact.	None. No Significant Impact.
<i>Wetlands</i>	None. No Significant Impact.	None. No Significant Impact.
<b>Cultural Resources</b>		

<b>Resource</b>	<b>No Action Alternative</b>	<b>Preferred Alternative</b>
<i>Archaeological</i>	None. No Significant Impact.	None. No Significant Impact.
<i>Historical Architecture</i>	None. No Significant Impact.	None. No Significant Impact.
<i>Native American Resources</i>	None. No Significant Impact.	None. No Significant Impact.
<b>Socioeconomics</b>		
<i>Economic Development</i>	None. No Significant Impact.	Minor beneficial. No Significant Impact.
<i>Demographics</i>	None. No Significant Impact.	None. No Significant Impact.
<i>Environmental Justice</i>	None. No Significant Impact.	None. No Significant Impact.
<i>Protection of Children</i>	None. No Significant Impact.	None. No Significant Impact.
<b>Transportation</b>		
<i>Roadways and Traffic</i>	None. No Significant Impact.	Minor Adverse. No Significant Impact.
<i>Installation Transportation</i>	None. No Significant Impact.	Negligible Adverse. No Significant Impact.
<i>Public Transportation</i>	None. No Significant Impact.	Negligible Adverse. No Significant Impact.
<b>Utilities</b>		
<i>Potable Water Supply</i>	None. No Significant Impact.	None. No Significant Impact.
<i>Wastewater System</i>	None. No Significant Impact.	None. No Significant Impact.
<i>Storm water System</i>	None. No Significant Impact.	Negligible Adverse. No Significant Impact.
<i>Energy Sources</i>	None. No Significant Impact.	None. No Significant Impact.
<b>Hazardous and Toxic Substances</b>		
<i>Uses of Hazardous Materials</i>	None. No Significant Impact.	Negligible Adverse. No Significant Impact.
<i>Storage and Handling Areas</i>	None. No Significant Impact.	Negligible to Minor Adverse. No Significant Impact.
<i>Site Contamination and Cleanup</i>	None. No Significant Impact.	None. No Significant Impact.
<b>Cumulative Effects</b>	None. No Significant Impact.	Negligible – mostly likely beneficial. No Significant Impact.
<b>Irreversible &amp; Irretrievable Commitment of Resources</b>	None. No Significant Impact.	Negligible. No Significant Impact.

## ES.7 MITIGATION RESPONSIBILITY AND PERMIT REQUIREMENTS

None of the predicted effects of the Proposed Action would result in significant impacts; therefore, mitigation is not needed, although the U.S. Army may consider the use of Best Management Practices (BMPs) in addition to those required by law, regulation, or U.S. Army/U.S. Air Force policy.. The following permits would be required in implementing the projects identified in this analysis:

- A State Pollutant Discharge Elimination System (SPDES) permit and associated Storm Water Pollution Prevention Plan (SWPPP) for the construction phase of the project would be necessary under the Clean Water Act (CWA) Section 402 requirements.
- A SPDES permit and associated SWPPP for AFRC complex operations would be necessary under the CWA Section 402 requirements.
- A new Spill Prevention Control and Countermeasures (SPCC) plan would be required for fuel storage tanks associated with any new emergency generators.
- A new Resource Conservation and Recovery Act (RCRA) Conditionally Exempt Small Quantity Generator (CESQG) identification number from the U.S. EPA would be necessary for the new OMS/AMSA facility.

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## 1.0 PURPOSE, NEED, AND SCOPE

### 1.1 INTRODUCTION

On September 8, 2005, the Base Realignment and Closure (BRAC) Commission recommended that certain realignment actions occur at Niagara Falls, NY. These recommendations were approved by the President on September 23, 2005, and forwarded to Congress. The Congress did not alter any of the BRAC Commission's recommendations, and on November 9, 2005, the recommendations became law. The BRAC Commission's recommendations must now be implemented as provided for in the Defense Closure and Realignment Act of 1990 (Public Law 101-510), as amended.

The BRAC law exempts consideration of the need for the action or alternative installations in preparing environmental documentation pursuant to the National Environmental Policy Act (NEPA). However, NEPA analysis and documentation is required to analyze how the BRAC actions will be implemented.

The following are the BRAC Commission's recommendations for the Niagara Falls U.S. Army Reserve Center (USARC) in Niagara Falls, NY (BRAC Commission, 2005):<sup>4</sup>

- Close the United States Army Reserve Center and Army Maintenance Support Activity, Niagara Falls, NY and construct a new Armed Forces Reserve Center [AFRC] on the existing site or on the former Niagara Falls Air Reserve Station [ARS], if a suitable site is available, in Niagara Falls, NY. The new AFRC shall have the capability to accommodate the NY National Guard units from the Niagara Falls Readiness Center, if the state of New York decides to relocate those National Guard units.

These actions are part of the decision to realign and transform Reserve Component facilities throughout New York State by collapsing four facilities in three geographically separated areas into three modern AFRCs.

To implement this recommendation, the U.S. Army proposes to construct a new AFRC and related facilities at Niagara Falls, NY to support the BRAC-directed changes in force structure. This Environmental Assessment (EA) analyzes the potential environmental impacts associated with the construction and operation of the new AFRC. The existing USARC will be closed, disposed, and reused or redeveloped by a third party. Because there is no identified transferee and no reuse plan for the existing USARC, at this time there is insufficient information to properly evaluate the reuse or redevelopment of the existing USARC. The appropriate NEPA analysis and documentation considering the cumulative impacts of all connected actions will be completed prior to disposal.

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<sup>4</sup> The BRAC Commission's original recommendation stipulated that the AFRC be constructed on the existing USARC site. However, the BRAC Commission subsequently revised their recommendation and included the Niagara Falls ARS as a potential construction site to reflect the continuing availability of the ARS which had previously been recommended for closure.

Details on the Proposed Action are provided in Section 2.0.

## 1.2 PURPOSE AND NEED

The purpose of the Proposed Action is to implement the BRAC Commission's recommendations pertaining to the existing USARC in Niagara Falls, NY, specifically, to provide for a new, integrated Armed Forces Reserve Center that can also accommodate units from the nearby New York State Army National Guard facilities. The AFRC is needed to provide functionally improved spaces for U.S. Army reserve units. This BRAC action is expected to significantly improve training, mobilization, equipment readiness, and deployment by creating new joint use facilities that consolidate activities that were previously located at multiple facilities into one location. At the same time, these actions are expected to reduce manpower and associated operating costs for maintaining existing facilities and properties. These BRAC actions were recommended as part of a larger decision to realign and transform Reserve Component facilities throughout New York State by collapsing multiple facilities into fewer, modern, integrated facilities.

The need for the Proposed Action is to improve the ability of the Nation to respond rapidly to challenges of the 21<sup>st</sup> century. The U.S. Army is legally bound to defend the United States and its territories, support national policies and objectives, and defeat nations responsible for aggression that endangers the peace and security of the United States. To carry out these tasks, the U.S. Army must adapt to changing world conditions and must improve its capabilities to respond to a variety of circumstances across the full spectrum of military operations. The following discusses three major initiatives that contribute to the U.S. Army's need for the Proposed Action.

**Base Realignment and Closure.** In previous rounds of BRAC, the explicit goal was to save money and downsize the military to reap a "peace dividend." In the 2005 BRAC round the Department of Defense's (DoD's) recommendations sought to reorganize its installation infrastructure to more efficiently support its forces, increase operational readiness and facilitate new ways of doing business. Thus, BRAC represents more than cost savings. It supports advancing the goals of transformation, improving military capabilities, and enhancing military value. The U.S. Army needs to carry out the BRAC Commission's recommendations at Niagara Falls USARC to achieve the objectives for which Congress established the BRAC process.

The following provides excerpts from the Secretary of Defense's justification for the BRAC Commission's recommendations for the State of New York, including the Niagara Falls USARC (BRAC Commission, 2005)<sup>5</sup>:

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<sup>5</sup> The BRAC Commission, upon revising their recommendation to include Niagara Falls ARS as a possible location to construct the AFRC, included justification for building at the Niagara Falls ARS in a technical footnote. The BRAC Commission's justification for building the AFRC at the Niagara Falls ARS is as follows: "Construction of the AFRC within the fence line of the enclave established by Recommendation 101, as amended, would avoid the redundancies inherent in maintaining two separate installations." (BRAC Commission, 2005).



*This recommendation transforms Reserve Component facilities throughout the State of New York. The implementation of this recommendation will enhance military value, improve homeland defense capability, greatly improve training and deployment capability, create significant efficiencies and cost savings, and is consistent with the Army's force structure plans and Army transformational objectives.*

*This recommendation closes four Army Reserve centers and constructs three multicomponent, multifunctional Armed Forces Reserve Centers (AFRCs), throughout the State of New York, capable of accommodating National Guard and Reserve units. This recommendation reduces military manpower and associated costs for maintaining existing facilities by collapsing three geographically separated facilities into three modern Armed Forces Reserve Centers. These joint-use facilities will significantly reduce operating costs and create improved business processes. The Department understands that the State of New York will close six New York Army Guard Armories: Niagara Falls, Bayshore, Freeport, Huntington Station, Patchogue and Riverhead, and Organizational Maintenance Shop 21 Bayshore, NY. The Armed Forces Reserve Centers will have the capability to accommodate these units if the state decides to relocate the units from these closed facilities into the new AFRCs.*

*This recommendation considered feasible locations within the demographic and geographic areas of the closing facilities and affected units. The sites selected were determined as the best locations because they optimize the Reserve Components' ability to recruit and retain Reserve Component soldiers and to train and mobilize units affected by this recommendation.*

*This recommendation provides the opportunity for other Local, State, or Federal organizations to partner with the Reserve Components to enhance homeland security and homeland defense at a reduced cost to those agencies.*

*Although not captured in the COBRA [cost operational benefits requirements analysis] analysis, this recommendation avoids an estimated \$81.6M in mission facility renovation costs and procurement avoidances associated with meeting AT/FP construction standards and altering existing facilities to meet unit training and communications requirements. Consideration of these avoided costs would reduce costs and increase the net savings to the Department of Defense in the 6-year BRAC implementation period and in the 20-year period used to calculate NPV [net present value].*

***U.S. Army Transformation and the U.S. Army Modular Force.*** On October 12, 1999, the Secretary of the Army and the Chief of Staff articulated a vision about people, readiness, and transformation of the U.S. Army to meet challenges emerging in the 21<sup>st</sup> century, and the need to be able to respond more rapidly to different types of operations requiring military action. The strategic significance of land forces continues to lie in their ability to fight and win the Nation's wars and in their providing options to shape the global environment to the benefit of the United States and its allies. Transformation responds to the U.S. Army's need to become more strategically responsive and dominant at every point on the spectrum of operations. In March 2002, the U.S. Army published its *Programmatic*

*Environmental Impact Statement for Army Transformation* for its proposal to conduct a multiyear, phased, and synchronized program of transformation. Over a 30-year period, the U.S. Army will conduct a series of transformation activities affecting virtually all aspects of U.S. Army doctrine, training, leader development, organizations, installations, materiel, and Soldiers. On April 11, 2002, the U.S. Army issued a Record of Decision (ROD) reflecting its intent to transform the U.S. Army. This EA evaluates a Proposed Action that comports with the transformation process, which is designed to provide the Nation with combat forces that are more responsive, deployable, agile, versatile, lethal, survivable, and sustainable.

**Installation Sustainability.** On October 1, 2004, the Secretary of the Army and the Chief of Staff issued *The Army Strategy for the Environment*. The strategy focuses on the interrelationships of mission, environment, and community. A sustainable installation simultaneously meets current and future mission requirements, safeguards human health, improves quality of life, and enhances the natural environment. A sustained natural environment is necessary to allow the U.S. Army to train and maintain military readiness.

At Niagara Falls, the proposed AFRC and related facilities are needed to ensure that adequate training and administrative space is available to support reserve units realigned from area facilities and the addition of the New York Army National Guard (NYARNG) unit. The existing facilities currently occupied by the relocating units do not have sufficient capacity for consolidation or expansion, and do not meet current force structure or unit design requirements. The existing facilities are also poorly configured and do not allow for the most effective training to complete mission requirements (U.S. Army, 2006b).

### 1.3 SCOPE

This EA identifies, documents, and evaluates the potential environmental effects of the proposed BRAC realignment actions in Niagara Falls, NY. This EA has been developed in accordance with NEPA and implementing regulations issued by the President's Council on Environmental Quality (CEQ), the U.S. Army, and the U.S. Air Force<sup>6</sup>. The *2006 Base Realignment Closure Manual for Compliance with the National Environmental Policy Act* (U.S. Army, 2006a) was used for guidance in preparing the EA. The purpose of the EA is to inform decision makers and the public of the likely environmental consequences of the Proposed Action and the alternatives for implementing it.

The Defense Base Closure and Realignment Act of 1990 specifies that NEPA does not apply to actions of the President, the Commission, or the DoD, except "(i) during the process of property disposal, and (ii) during the process of relocating functions from a military installation being closed or realigned to another military installation after the receiving installation has been selected but before the functions are relocated" (Sec. 2905(c)(2)(A), Public Law 101-510, as amended). The law further specifies that in applying the provisions of NEPA to the process, the

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<sup>6</sup> Council on Environmental Quality *Regulations for Implementing the Procedural Provisions of the National Environmental Policy Act*, 40 Code of Federal Regulations (CFR) Parts 1500–1508; *Environmental Analysis of Army Actions*, 32 CFR Part 651; and *Environmental Impact Analysis Process*, 32 CFR 989.

Secretary of Defense and the secretaries of the military departments concerned do not have to consider “(i) the need for closing or realigning the military installation which has been recommended for closure or realignment by the Commission, (ii) the need for transferring functions to any military installation which has been selected as the receiving installation, or (iii) military installations alternative to those recommended or selected” (Sec. 2905(c)(2)(B)). The Commission’s deliberation and decision, as well as the need for closing or realigning a military installation, are exempt from NEPA. Accordingly, this EA does not address the need for realignment.

#### **1.4 PUBLIC PARTICIPATION AND INVOLVEMENT**

The U.S. Army invites public participation in the NEPA process. Consideration of the views and information of all interested persons promotes open communication and enables better decision making. All agencies, organizations, and members of the public having a potential interest in the Proposed Action, including minority, low-income, disadvantaged, and Native American groups, are urged to participate in the decision making process.

Public participation opportunities with respect to this EA and decision making on the Proposed Action are guided by 32 Code of Federal Regulations (CFR) Part 651. Upon completion, the EA will be made available to the public for 30 days, along with a draft Finding of No Significant Impact (FONSI).<sup>7</sup> During this time the U.S. Army will consider any comments submitted by individuals, agencies, or organizations on the Proposed Action, the EA, or draft FONSI. At the conclusion of the comment period, the U.S. Army may, if appropriate, execute the FONSI and proceed with implementing the Proposed Action. If it is determined that implementing the Proposed Action would result in significant impacts, the U.S. Army will commit to mitigation actions sufficient to reduce impacts below significance levels or publish in the *Federal Register* a Notice of Intent (NOI) to prepare an Environmental Impact Statement (EIS).

Interested parties are invited to review and comment on the EA and Draft FONSI during the 30-day comment period, September 12, 2007 through October 11, 2007. The EA and Draft FONSI can be accessed on the World Wide Web at:

[http://www.hqda.army.mil/acsim/brac/env\\_ea\\_review.htm](http://www.hqda.army.mil/acsim/brac/env_ea_review.htm)

Copies of the EA can also be viewed at the following local library:

Niagara Falls Public Library  
1425 Main St  
Niagara Falls, NY 14305

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<sup>7</sup> Finding of No Significant Impact is abbreviated FNSI by the U.S. Army and FONSI by the U.S. Air Force. Because the Finding of No Significant Impact would be signed by the U.S. Air Force Reserve, FONSI will be used throughout this EA.

Comments on the EA and Draft FONSI should be submitted during the 30-day public comment period via mail, fax, or electronic mail to the following:

914th AW Office of Public Affairs  
2720 Kirkbridge Drive  
Niagara Falls ARS, NY 14304-5001  
Fax: (716) 236-3268  
Email: 914AW/PA@niagarafalls.af.mil

## **1.5 IMPACT ANALYSIS PERFORMED**

An interdisciplinary team of environmental scientists, biologists, planners, economists, engineers, archaeologists, historians, and military technicians has analyzed the Proposed Action and alternatives in light of existing conditions and has identified relevant beneficial and adverse impacts associated with the action. Section 1.0 of the EA provides the purpose, need, and scope. The Proposed Action is described in Section 2.0 and the alternatives, including the No Action Alternative, are described in Section 3.0. Conditions existing as of 2005, considered to be the “baseline” conditions, are described in Section 4.0 - Affected Environment and Environmental Consequences. The expected impacts of the Proposed Action, also described in Section 4.0, are presented immediately following the description of baseline conditions for each environmental resource addressed in the EA. Section 4.0 also addresses the potential for cumulative effects and mitigation measures are identified where appropriate. Section 5.0 presents the findings and conclusions.

The impacts of the Proposed Action on socioeconomics were assessed using the Economic Impact Forecast System (EIFS) developed by the U.S. Army Construction Engineering Research Laboratory (CERL). This model allows all base closure and realignment actions to be evaluated in the same way.

## **1.6 FRAMEWORK FOR ANALYSIS**

The selection of the Preferred Alternative rests on numerous factors such as mission requirements, schedule, availability of funding, and environmental considerations. In addressing environmental considerations, the U.S. Army is guided by relevant statutes (and their implementing regulations) and Executive Orders that establish standards and provide guidance on environmental and natural resources management and planning.

### **1.6.1 Relevant Statutes and Executive Orders**

Relevant statutes include the Clean Air Act (CAA), Clean Water Act (CWA), Noise Control Act, Endangered Species Act (ESA), National Historic Preservation Act (NHPA), Archaeological Resources Protection Act (ARPA), Resource Conservation and Recovery Act (RCRA), Toxic Substances Control Act (TSCA), and the Farmland Protection Policy Act (FPPA). Executive Orders bearing on the Proposed Action include Executive Order (EO) 11988 (*Floodplain Management*), EO 11990 (*Protection of Wetlands*), EO 12088 (*Federal Compliance with Pollution Control Standards*), EO 12580 (*Superfund Implementation*), EO 12898 (*Federal Actions to Address*

*Environmental Justice in Minority Populations and Low-Income Populations*), EO 13045 (*Protection of Children from Environmental Health Risks and Safety Risks*), EO 13175 (*Consultation and Coordination with Indian Tribal Governments*), EO 13186 (*Responsibilities of Federal Agencies to Protect Migratory Birds*), and EO 13423 (*Strengthening Federal Environmental, Energy, and Transportation Management*). These authorities are addressed in various sections throughout this EA when relevant to environmental resources and conditions. The full text of the laws, regulations, and EOs is available on the Defense Environmental Network & Information Exchange Web site at <http://www.denix.osd.mil>.

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## **2.0 DESCRIPTION OF THE PROPOSED ACTION**

### **2.1 INTRODUCTION**

This section describes the U.S Army's Preferred Alternative for implementing the BRAC Commission's recommendations for Niagara Falls USARC. The BRAC Commission recommended the realignment of the following facilities/units in Niagara Falls, NY. They include<sup>8</sup>:

- Close the United States Army Reserve Center and Army Maintenance Support Activity, Niagara Falls, NY and construct a new Armed Forces Reserve Center on the existing site or on the former Niagara Falls Air Reserve Station, if a suitable site is available, in Niagara Falls, NY. The new AFRC shall have the capability to accommodate the NY National Guard units from the Niagara Falls Readiness Center, if the state of New York decides to relocate those National Guard units.

### **2.2 CRITERIA FOR IDENTIFICATION OF PROPOSED BRAC ACTIONS**

The DoD applied the following 8 major criteria when evaluating individual facility BRAC actions.

Military Value (higher priority):

1. The current and future mission capabilities and the impact on operational readiness of the total force of the DoD, including the impact on joint war-fighting, training, and readiness.
2. The availability and condition of land, facilities, and associated airspace (including training areas suitable for maneuver by ground, naval, or air forces throughout a diversity of climate and terrain areas and staging areas for the use of the Armed Forces in homeland defense missions) at both existing and potential receiving locations.
3. The ability to accommodate contingency, mobilization, surge, and future total force requirements at both existing and potential receiving locations to support operations and training.
4. The cost of operations and the manpower implications.

Other Considerations:

5. The extent and timing of potential costs and savings, including the number of years, beginning with the date of completion of the closure or realignment, for the savings to exceed the cost pay-back period.
6. The economic impact on existing communities in the vicinity of military installations.

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<sup>8</sup> The BRAC Commission's original recommendation stipulated that the AFRC be constructed on the existing USARC site. However, the BRAC Commission subsequently revised their recommendation and included the Niagara Falls ARS as a potential construction site to reflect the continuing availability of the ARS which had previously been recommended for closure.

7. The ability of the infrastructure of both the existing and potential receiving communities to support forces, missions, and personnel.
8. The environmental impact, including the impact of costs related to potential environmental restoration, waste management, and environmental compliance (BRAC Commission, 2005).

The application of these criteria to the need to realign and restructure reserve forces and facilities in the State of New York yielded a number of proposed facility changes, among them the proposed actions in Niagara Falls.

This BRAC EA examines the environmental impact from efforts that would take place within the 6-year BRAC implementation window. The site-specific BRAC related projects are defined by existing Defense Department (DD) Form 1391s. The DD Form 1391 is used by the DoD to submit requirements and justifications in support of funding requests for military construction to Congress.

### **2.3 PROPOSED ACTION/IMPLEMENTATION PROPOSED**

The Proposed Action is to construct a new AFRC and associated support facilities to support U.S. Army Reserve units and a NY Army National Guard (NYARNG) unit relocating from the local Niagara Falls area. Figure 2-1 provides a general area map indicating the location of the existing Niagara Falls USARC and the Niagara Falls ARS in the larger community.

The Proposed Action is further detailed below, in the *Facilities* (Section 2.3.1), *Equipment* (Section 2.3.2), and *Personnel* (Section 2.3.3) sub-sections.

#### **2.3.1 Facilities**

The proposed AFRC would provide a 600-member training facility with administrative, educational, assembly, library, learning center, vault, and weapons simulator areas for 12 U.S. Army Reserve units and one NYARNG unit. Associated support facilities include an Organizational Maintenance Shop (OMS)/Area Maintenance Support Activity (AMSA), an unheated storage building, and a Deployable Medical System (DEPMEDS).<sup>9</sup> The buildings would be of permanent construction with reinforced concrete foundations; concrete floor slabs; structural steel frames; masonry veneer walls; standing seam metal roofs; heating, ventilation, and air conditioning (HVAC) systems; plumbing; mechanical systems; security systems; and electrical systems. The DEPMEDS will consist of an approximately 1-acre site with a gravel surface, fencing, lighting, and electrical outlets (U.S. Army, 2006b).

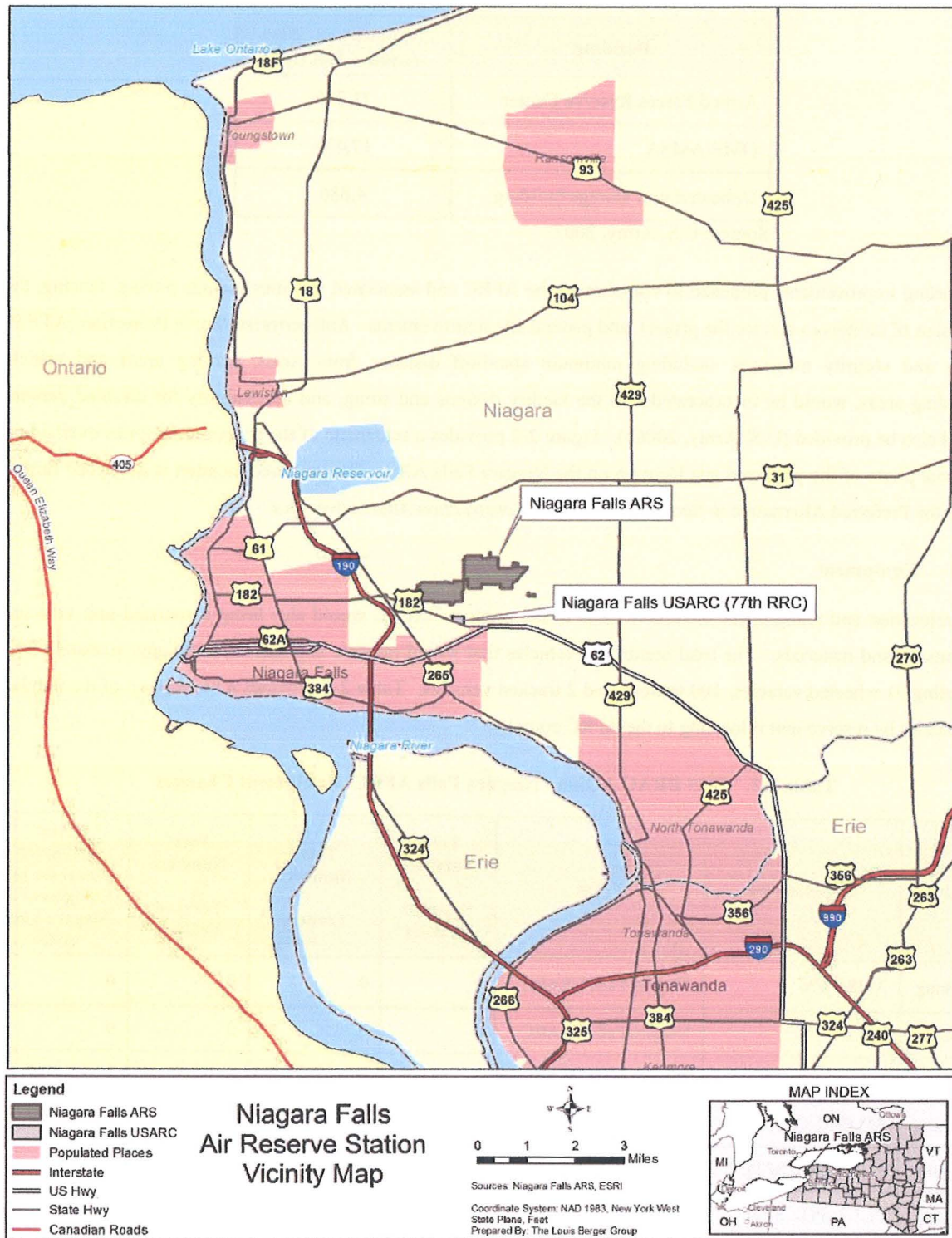
The approximate size of the AFRC and the additional support facilities are provided in Table 2-1. In addition, there would be approximately 22,167 square yards (sy) of paved areas including military equipment parking (MEP) areas, privately-owned vehicle (POV) parking areas, and access roads.

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<sup>9</sup> DEPMEDS is a mixture of Medical and non Medical equipment used to form field type Table Organization and Equipment (TO&E) hospitals.



Figure 2-1. Niagara Falls USARC and Niagara Falls ARS Area Map



**Table 2-1. AFRC Complex Building Sizes**

<b>Building</b>	<b>Approximate Size (square feet (ft<sup>2</sup>))</b>
Armed Forces Reserve Center	71,720
OMS/AMSA	17,476
Unheated-unit storage building	4,886

Source: U.S. Army, 2007

Supporting improvements proposed to compliment the AFRC and associated facilities include paving, fencing, the extension of utilities to service the project, and general site improvements. Anti-terrorism/Force Protection (AT/FP) safety and security measures, including minimum stand-off distance from roads, parking areas and vehicle unloading areas, would be incorporated into the facility designs and siting, and accessibility for disabled persons would also be provided (U.S. Army, 2006b). Figure 2-2 provides a schematic of the proposed facilities overlaid on an aerial photo of the preferred site location on the Niagara Falls ARS. The preferred location is described further under the Preferred Alternative in Section 3.3.4 – *New Construction Alternative Sites*.

### 2.3.2 Equipment

The relocation and realignment of reserve units to the proposed AFRC would also bring associated unit vehicles, equipment, and materials. The total number of vehicles that would relocate is projected to be approximately 202, including 91 wheeled vehicles, 109 trailers, and 2 tracked vehicles. Table 2-2 provides a breakdown of the number of vehicles by reserve unit relocating to the AFRC complex.

**Table 2-2. 2005 BRAC Action - Niagara Falls AFRC: Equipment Changes**

<b>Action</b>	<b>Organization</b>	<b>From</b>	<b>Total Number:  Wheeled Vehicles</b>	<b>Total Number:  Trailers</b>	<b>Total Number:  Tracked Vehicles</b>	<b>Total Estimated Increase in Equipment at Niagara Falls ARS</b>
Incoming	AMSA #76	Niagara Falls USARC	0	0	0	0
Incoming	TM 1	Niagara Falls USARC	0	0	0	0
Incoming	Retention Office	Niagara Falls USARC	0	0	0	0
Incoming	TM (SPT OPS)	Niagara Falls USARC	1	1	0	2
Incoming	PLT 1 (POL SPT)	Niagara Falls USARC	12	20	0	32
Incoming	PLT 2 (POL SPT)	Niagara Falls USARC	12	20	0	32
Incoming	PLT 3 (POL SPT)	Niagara Falls USARC	13	18	0	31
Incoming	PLT 4 (Equip. Maint.)	Niagara Falls USARC	9	4	2	15

Action	Organization	From	Total Number: Wheeled Vehicles	Total Number: Trailers	Total Number: Tracked Vehicles	Total Estimated Increase in Equipment at Niagara Falls ARS
Incoming	TM (Assault Hose)	Niagara Falls USARC	5	9	0	14
Incoming	DET (HQ)	Niagara Falls USARC	2	3	0	5
Incoming	CO HOSP (164B)	Niagara Falls USARC	2	18	0	20
Incoming	DET SURG (FWD)	Niagara Falls USARC	4	4	0	8
Incoming	NYARNG	Niagara Falls	31	12	0	43
		<b>TOTAL</b>	<b>91</b>	<b>109</b>	<b>2</b>	<b>202</b>

Source: U.S. Army, 2006c; Murphy, 2007

### 2.3.3 Personnel

Implementing the BRAC Commission's recommendations for Niagara Falls would result in the total assignment of approximately 586 workforce personnel to the new AFRC, 541 of whom are reservists and 45 of whom are full-time personnel. The potential direct and/or cumulative impacts on the environment from the increase in personnel associated with the new AFRC are considered in this EA. Table 2-3 provides a breakdown of the number of personnel by reserve unit relocating to the AFRC complex.

**Table 2-3. 2005 BRAC Action - Niagara Falls ARS: Personnel Changes**

Action	Organization	From	Total Number of Reservists	Total Number of Full-time Personnel	Total Estimated Increase in Personnel at Niagara Falls ARS
Incoming	AMSA #76	Niagara Falls USARC	0	17	17
Incoming	TM 1	Niagara Falls USARC	13	0	13
Incoming	Retention Office	Niagara Falls USARC	2	2	4
Incoming	TM (SPT OPS)	Niagara Falls USARC	8	0	8
Incoming	PLT 1 (POL SPT)	Niagara Falls USARC	53	3	56
Incoming	PLT 2 (POL SPT)	Niagara Falls USARC	53	0	53
Incoming	PLT 3 (POL SPT)	Niagara Falls USARC	53	0	53
Incoming	PLT 4 (Equip. Maint.)	Niagara Falls USARC	42	5	47
Incoming	TM (Assault Hose)	Niagara Falls USARC	15	0	15
Incoming	DET (HQ)	Niagara Falls USARC	16	3	19

Action	Organization	From	Total Number of Reservists	Total Number of Full-time Personnel	Total Estimated Increase in Personnel at Niagara Falls ARS
Incoming	CO HOSP (164B)	Niagara Falls USARC	137	4	141
Incoming	DET SURG (FWD)	Niagara Falls USARC	20	1	21
Incoming	NYARNG	Niagara Falls	129	10	139
		<b>TOTAL</b>	<b>541</b>	<b>45</b>	<b>586</b>

Source: U.S. Army, 2006c; Murphy, 2007

## 2.4 SCHEDULE

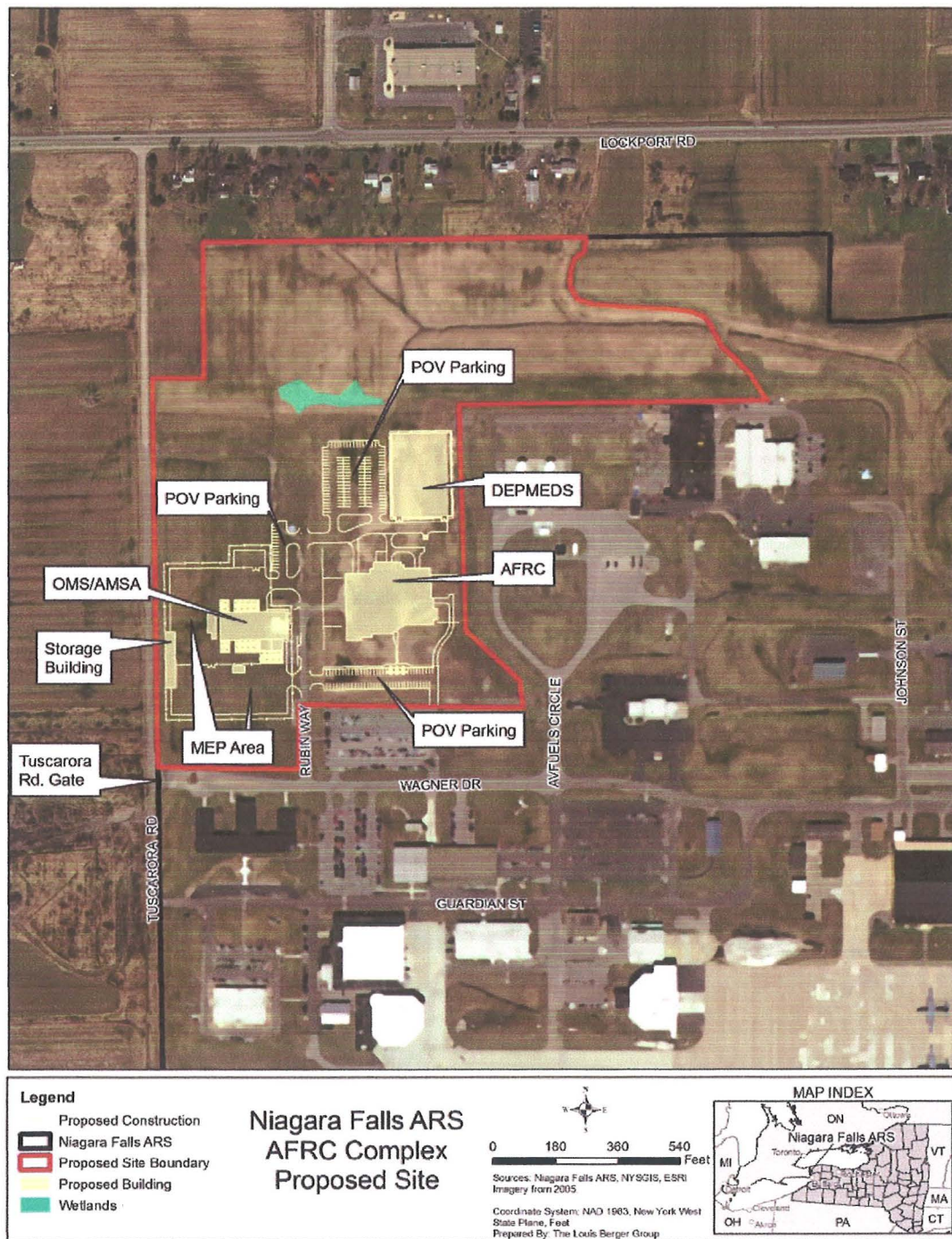
Under the BRAC law, the U.S. Army must initiate all realignments not later than September 15, 2007, and complete all realignments not later than September 15, 2011.<sup>10</sup>

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<sup>10</sup> Section 2904(a), Public Law 101-510, as amended, provides that the Army must "... initiate all closures and realignments no later than two years after the date on which the President transmits a report [by the BRAC Commission] to the Congress ... containing the recommendations for such closures or realignments; and ... complete all such closures and realignments no later than the end of the six year period beginning on the date on which the President transmits the report ...". The President took the specified action on September 15, 2005.



Figure 2-2. Proposed AFRC and Associated Facilities – Niagara Falls ARS



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## 3.0 ALTERNATIVES TO THE PROPOSED ACTION

### 3.1 INTRODUCTION

A key principle of NEPA is that agencies are to give full consideration to all reasonable alternatives to a proposed action. Considering alternatives helps to avoid unnecessary impacts and allows analysis of reasonable ways to achieve the stated purpose. To warrant detailed evaluation, an alternative must be reasonable. To be considered reasonable, an alternative must be affordable, capable of implementation, and satisfactory with respect to meeting the purpose of and need for the action. The following discussion identifies alternatives considered by the U.S. Army and identifies whether they are feasible and, hence, subject to detailed evaluation in this EA.

Alternatives to the Proposed Action have been examined according to three variables: the means to accommodate realigned units, siting of new construction, and schedule. This section presents the U.S. Army's development of alternatives and addresses alternatives available for the Proposed Action. This section also describes the No Action Alternative, under which the Proposed Action would not be implemented.

### 3.2 DEVELOPMENT OF ALTERNATIVES

*Means to Accommodate Realigned Units.* Relocation of units and establishment of new units involves ensuring that the installation has adequate physical accommodations for personnel and their operational requirements. The U.S. Army considers four means of meeting increased space requirements:

- Use of existing facilities
- Modernization or renovation of existing facilities
- Leasing of off-post facilities
- Construction of new facilities

U.S. Army Regulation 210-20, *Master Planning for Army Installations*, establishes U.S. Army policy to maximize the use of existing facilities. The regulation directs that new construction will not be authorized to meet a mission that can be supported by the use of existing underutilized but adequate facilities, provided that the use of such facilities does not degrade operational efficiency. Under this policy, selection and use of facilities to support mission requirements adheres to the foregoing four choices in the order in which they are listed. That is, if there are adequate existing facilities to accommodate requirements, and absent other overriding considerations, further examination of renovation, leasing, or construction alternatives is not required. Similarly, if a combination of use of existing facilities and renovation satisfies the U.S. Army's needs, leasing or new construction need not be addressed. New construction may proceed only when use of existing facilities, renovation, leasing, or a combination of such measures are inadequate to meet mission requirements.

**Siting of New Construction.** The U.S. Army considers new construction of facilities when use of existing facilities, renovation, or leasing would fail to provide for adequate accommodations of realigned functions. The U.S. Army considers both general and specific siting criteria for construction of new facilities.

General siting criteria include consideration of compatibility between the functions to be performed and the installation land use designation for the site, adequacy of the site for the function required, proximity to related activities, distance from incompatible activities, availability and capacity of roads, efficient use of property, development density, potential future mission requirements, and special site characteristics, including environmental incompatibilities.

Specific siting criteria include consideration of location of the workforce and efficient, streamlined management of functions. Collocation of similar types of functions, as opposed to dispersion, permits more efficient use of equipment, vehicle, and other assets.

**Schedule.** Alternatives for scheduling of proposed realignment actions are principally affected by three factors: the availability of facilities to house realigned personnel and functions, efforts to minimize potential disruption of mission activities based on the number of personnel involved in the relocation or the amount of work to be performed, and early realization of benefits to be gained by completion of the realignments. In most cases, minor shifts in schedule would not produce different environmental results.

### **3.3 ALTERNATIVES TO THE PROPOSED ACTION**

#### **3.3.1 Use of Off-Base Leased Space**

The BRAC Commission's recommendation, as described in Section 1.0, directs that the new AFRC and related facilities be constructed at the existing USARC facility or on the Niagara Falls ARS. Therefore, the use of off-base leased space is not feasible and is not further evaluated in this EA.

#### **3.3.2 Acquisition of New Property**

This alternative is not permitted under the BRAC Commission's recommendations as authorized by the U.S. Congress and the President (BRAC Commission, 2005) and would likely substantially undermine the cost savings realized through the closure of multiple U.S. Army Reserve and NYARNG facilities. Therefore, the acquisition of new property is not a feasible alternative and is not further evaluated in this EA.

#### **3.3.3 Existing Facilities**

The BRAC Commission's recommendations direct that the existing Niagara Falls USARC facility be closed and that a new AFRC complex be constructed. Therefore, use of the existing facilities is not an alternative. Additionally, there are no existing facilities on the Niagara Falls ARS that could reasonably accommodate the requirements of the realigning units, either singularly or combined. Accordingly, the use of existing facilities is not further evaluated in this EA.



### **3.3.4 New Construction Alternative Sites**

Construction of new facilities is driven by the need to ensure adequate space is available for the mission requirements of the realigning units. Since BRAC Law directs that the existing USARC facilities be closed and there are no existing facilities available at the Niagara Falls ARS that could reasonably accommodate the requirements of the realigning units, new construction is required and is evaluated as the preferred alternative in this EA.

The BRAC Commission identified two potential locations where the proposed AFRC complex could be constructed; the existing USARC property and the Niagara Falls ARS. The U.S. Army evaluated each location to determine whether these sites could be considered reasonable alternatives for implementing the Proposed Action. Each site is briefly discussed below and its location is indicated in Figure 3-1.

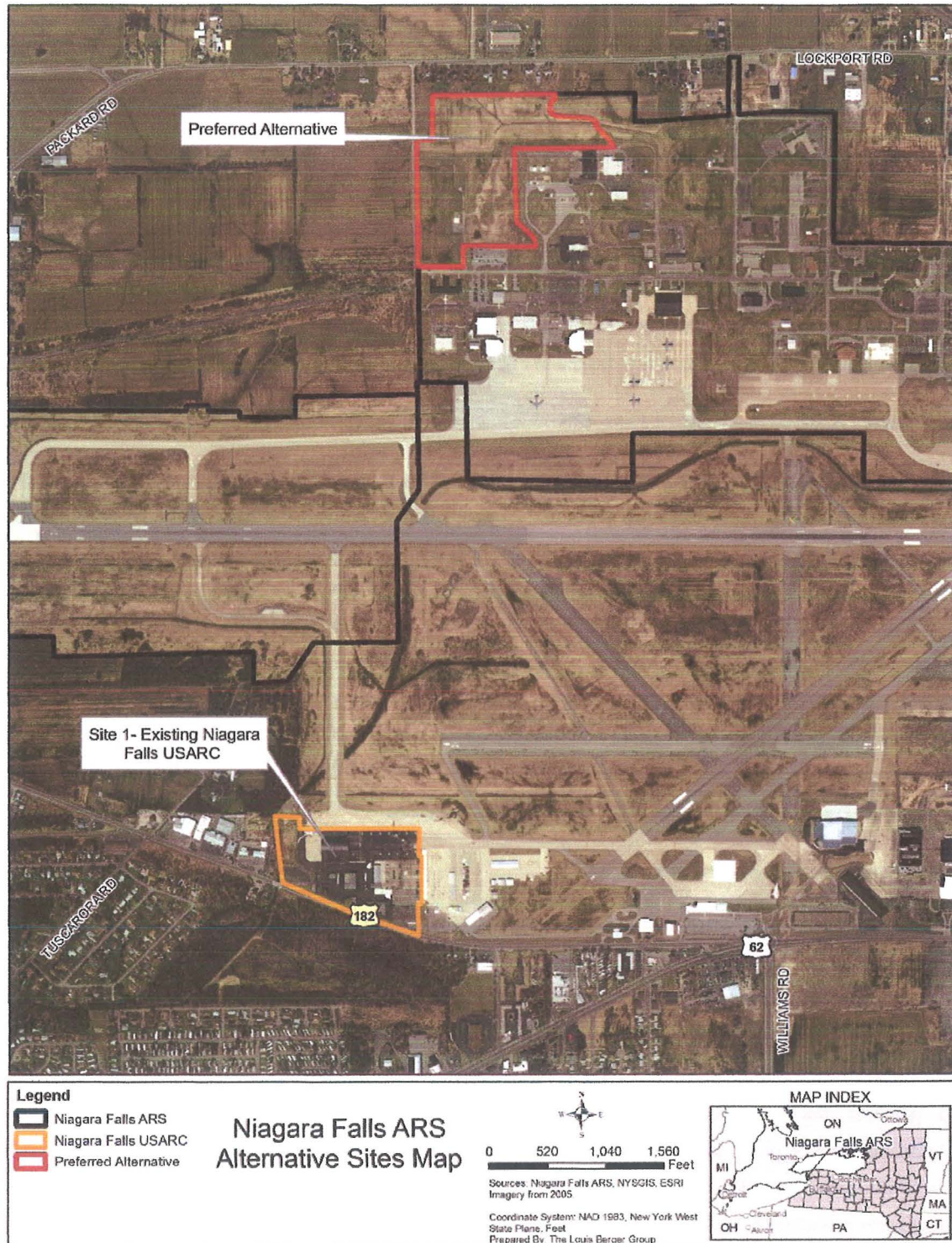
#### ***Site 1: Preferred Alternative – Niagara Falls ARS***

The preferred site is located in the northwest portion of the Niagara Falls ARS near the Tuscarora Gate. This site consists of approximately 18 undeveloped acres and can support the size and footprint of the proposed AFRC, OMS/AMSA, MEP area and other associated facilities, while also meeting current AT/FP stand-off requirements. Constructing the proposed AFRC complex at this site would consolidate three separate military installations (Niagara Falls USARC, NYARNG, and Niagara Falls ARS) into a single contiguous base; increasing the efficiency of command and control, allowing for joint use of support facilities (e.g. dining facilities), and significantly reducing overall operating costs. Closing the existing Niagara Falls USARC would also allow the U.S. Army to excess this parcel of land, thereby reducing its inventory of property and cutting costs. The USARC property would then be available for local economic redevelopment, thereby benefiting both the local and regional areas. This site is identified as the Preferred Alternative, and is fully evaluated in the EA.

#### ***Site 2: Niagara Falls USARC Property***

As discussed in Section 3.3.3, the use of existing Niagara Falls USARC facilities is not a viable alternative. Therefore, this alternative would involve demolishing the 14 existing buildings and constructing a new AFRC, OMS/AMSA and other related facilities in their place. Though difficult, the site could support the size and footprint of the proposed facilities and could meet current AT/FP stand-off requirements. However, the configuration of the property and the AT/FP requirements severely constrain where the new facilities could be built on the site and would preclude the continued temporary use of most of the existing structures during the 2-year demolition/construction phase of the project; a majority of the existing structures fall within the footprint of where the new facilities would need to be constructed. Thus, temporary structures would need to be constructed at another location to accommodate the U.S. Army Reserve units during the 2-year demolition/construction phase of their new facilities. Another disadvantage of this site is that it would not consolidate the military functions of different U.S. Army and NYARNG facility locations into a single integrated facility. Therefore, it would not help to meet one of the U.S. Army's goals of increasing the efficient joint use of base support facilities or command and control between

**Figure 3-1. Alternative Sites for the Proposed AFRC at Niagara Falls**



multiple installations (Niagara Falls AFRC, Niagara Falls ARS, and NYARNG units), and the benefits of significant cost reductions in operations would not be realized. It would also not support the BRAC Commission's justification of avoiding the redundancies inherent in maintaining two separate installations. The continued use of this site would also preclude the ability of the U.S. Army to excess the property and would not properly support the beneficial reuse of the site for the local community. For these reasons, this alternative was evaluated to not be a viable alternative to the preferred AFRC site and is not carried forward for further evaluation in this EA.

### **3.3.5 Scheduling Alternatives**

The schedule for implementing the Proposed Action must balance the timeframes for constructing the new facilities and the planned arrival dates of incoming units, all within the 6-year limitation of the BRAC law. Realignment earlier than September 15, 2007 as shown in the schedule in Section 2.4 is not feasible in light of the time required to build facilities. Shifting of schedules to accomplish realignment at a date later than September 15, 2011 would unnecessarily delay the realization of benefits to be gained. Since earlier implementation is not possible, and since delay is avoidable and unnecessary, alternative schedules are not further evaluated in this EA.

### **3.4 NO ACTION ALTERNATIVE**

Under the No Action Alternative the various reserve units presently located at the Niagara Falls USARC and the NYARNG would continue to train at and operate from their current facilities. Many of these facilities are old and are not properly configured to allow the most effective training to complete mission requirements. Many of them also do not meet the AT/FP stand-off requirements. Implementation of this alternative is not possible due to the BRAC Commission's recommendations having the force of law. However, inclusion of the No Action Alternative is prescribed by CEQ regulations and serves as a baseline against which the impacts of the Proposed Action and alternatives can be evaluated. Accordingly, the No Action Alternative is evaluated in this EA.

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## **4.0 AFFECTED ENVIRONMENT AND CONSEQUENCES**

### **4.1 INTRODUCTION**

This section describes the current environmental conditions of the areas that would be affected should the Proposed Action be implemented. It also analyzes the potential effects arising from the implementation of the Proposed Action. The description of environmental conditions represents the baseline conditions, or the “as is” or “before the action” conditions at the installation. The baseline is further defined as the level of operations and environmental conditions at the time of the BRAC Commission’s fall 2005 decision. The baseline facilitates subsequent identification of changes in conditions that would result from the realignment. The environmental consequences portion represents the culmination of scientific and analytic analysis of potential effects arising from the implementation of the Proposed Action. Direct, indirect, and cumulative effects of the Proposed Action are also addressed.

For each environmental resource area the baseline conditions are presented first followed immediately thereafter by evaluation of the potential impacts of the No Action and the Preferred Alternatives. Where appropriate and definable, a specific Region of Influence (ROI) is indicated for a given resource area.

### **4.2 LAND USE**

#### **4.2.1 Affected Environment**

This section describes the general land use conditions within the affected environment of the ROI. The ROI for land use is defined as the Niagara Falls ARS (Installation) itself and the surrounding communities of Niagara and Wheatfield.

##### ***4.2.1.1 Regional Geographic Setting and Location***

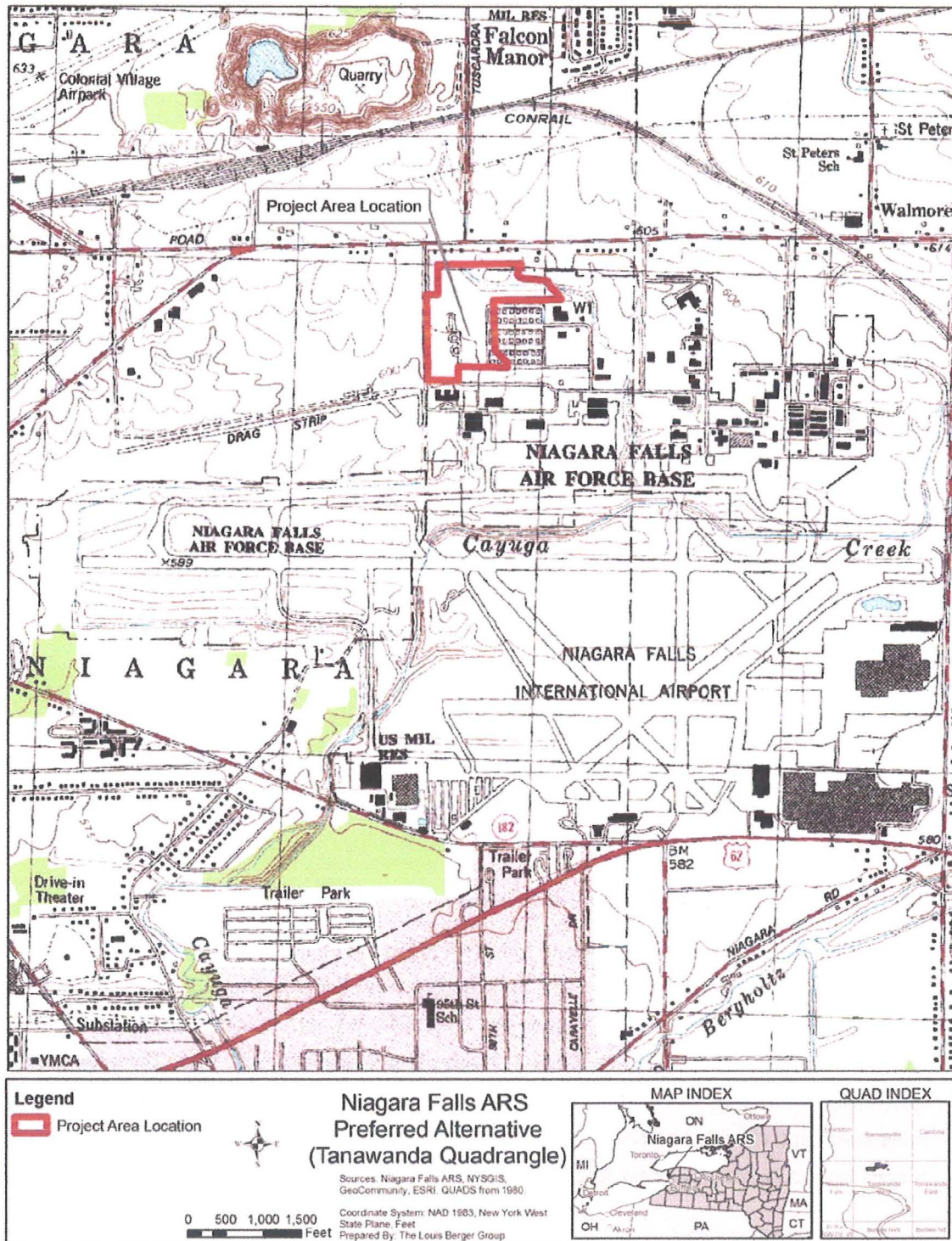
Niagara Falls ARS is located in northwestern New York in Niagara County approximately 6 miles east of the City of Niagara Falls, and 20 miles north of the City of Buffalo, New York (see Figure 2-1 for a vicinity map). The installation lies within the towns of Niagara and Wheatfield, NY on the northern part of the Niagara Falls International Airport (IAP) within the towns of Niagara and Wheatfield, New York. The installation occupies approximately 985 acres; 503 acres owned by Niagara Falls ARS, 76 acres leased, with the remaining 406 acres being easement (i.e. utility line easements) or public domain (i.e. joint use of the flight lines and runways of the Niagara Falls IAP). (see Figure 4-1 for a U.S. Geological Survey (USGS) quadrangle map).

##### ***4.2.1.2 Installation Land***

The information provided below was obtained from the Niagara Falls ARS General Plan (NFARS, 1998).

Niagara Falls ARS’ land use plan emphasizes the consolidation of similar activities and the promotion of positive

Figure 4-1. USGS Quadrangle Map – Niagara Falls ARS, NY



functional relationships between land uses. As older facilities are demolished, new buildings should be sited according to the plan. This effort will result in the consolidation of aircraft operations and maintenance functions adjacent to the airfield. See Figure 4-2 for existing land use on Niagara Falls ARS.

Most of the changes to the Installation's development pattern involve the consolidation of land use pockets to form larger land use areas yielding greater future development potential. Emphasis was also placed on preserving the 100-year floodplain and wetland areas by designating these sites as either open space or outdoor recreation areas. The key to successfully developing Niagara Falls ARS would be the identification and consolidation of compatible activities and the continued use of land use areas as opposed to individually sited facilities.

Niagara Falls ARS is a compact Installation bounded by Tuscarora Road to the west, Lockport Road to the north, Walmore Road to the east, and Niagara Falls IAP to the south. The dominant feature on the southern side of the Installation is the airfield, consisting of permanent and temporary aircraft parking aprons, apron access taxiways and the international airport property. Immediately adjacent to the airfield is a consolidated area devoted to aircraft operations and maintenance. Within this area are key operational facilities, including the fuels systems maintenance hangar, aircraft maintenance hangar, and aircraft maintenance shop, which are served by the hangar access apron. An isolated operational area surrounds the engine test stand.

There are three main land use types within the Installation boundary: administrative, industrial, and aircraft and maintenance. The central portion of the Installation is primarily made up of administrative land use areas. Two large parcels of industrial land use areas are located in the western and eastern portions of the Installation. These areas are surrounded by intermixed open space, community, and recreational land use types.

#### ***4.2.1.3 Surrounding Land***

The predominant zoning classification around the Installation is residential/industrial. The Installation is predominantly surrounded by agricultural land to the north, though there is also a residential subdivision located approximately 0.5 miles to the north and several individual residences border the Installation on the south side of Lockport Road. Agricultural land also predominates to the east of the Installation, while open space, wetlands, and brush cover are located to the east and west of the Installation. Several residential subdivisions are located south and southwest of the Installation, and industrial areas are scattered both west and southeast of the Installation. Northwest of the Installations a large tract of industrially-zoned land currently used for agricultural purposes (AFRC, 1998)

Immediately to the south of the Installation is the main taxiway used by the NYARNG and Air Force Reserve Command (AFRC) aircraft accessing Niagara Falls IAP. Further south are the airport's general aviation and passenger terminals and hangars, and the remainder of the airport's runways and taxiways. The presence of these facilities effectively precludes the Installation from constructing any facilities south of this point.



#### ***4.2.1.4 Current and Future Development in the Region of Influence***

The 914th Airlift Wing (AW) has proposed twelve capital improvement program projects to implement at the Niagara Falls ARS, some of which have been or are currently being completed. The purpose for these projects is to replace inadequate existing facilities or construct new facilities to perform activities necessary to meet U.S. Air Force mission, emergency response, and force protection concerns at Niagara Falls ARS. The projects include constructing a base civil engineer administrative facility/demolish Building 403, constructing an addition to the base medical training facility/clinic, installing force protection measures at the Main Gate, demolish and construct visiting quarters facilities (Phases I and II), constructing a new fire/crash rescue facility, demolishing and constructing a new dining facility, constructing a recycling/centralized waste center, constructing a flightline access road, demolishing and constructing a new lift station, constructing an addition and altering the security police facility, constructing an Air Force Reserve Command recruitment billboard, and constructing a vehicle wash facility.

Following the implementation of the Proposed Action, the U.S. Army Reserve has preliminary plans to excess the existing USARC property south of the Niagara Falls IAP (Ajodah, 2007). While there is commercial interest in the property, there are no planned development projects related to this parcel of land at this time. Subsequent NEPA compliance documentation will be prepared, if necessary, to address any issues related to the potential excessing of the property/buildings. Such documentation will be prepared when a formal proposal or plan for the excessing and future use of the land has been identified.

#### ***4.2.2 Environmental Consequences***

##### ***4.2.2.1 No Action Alternative***

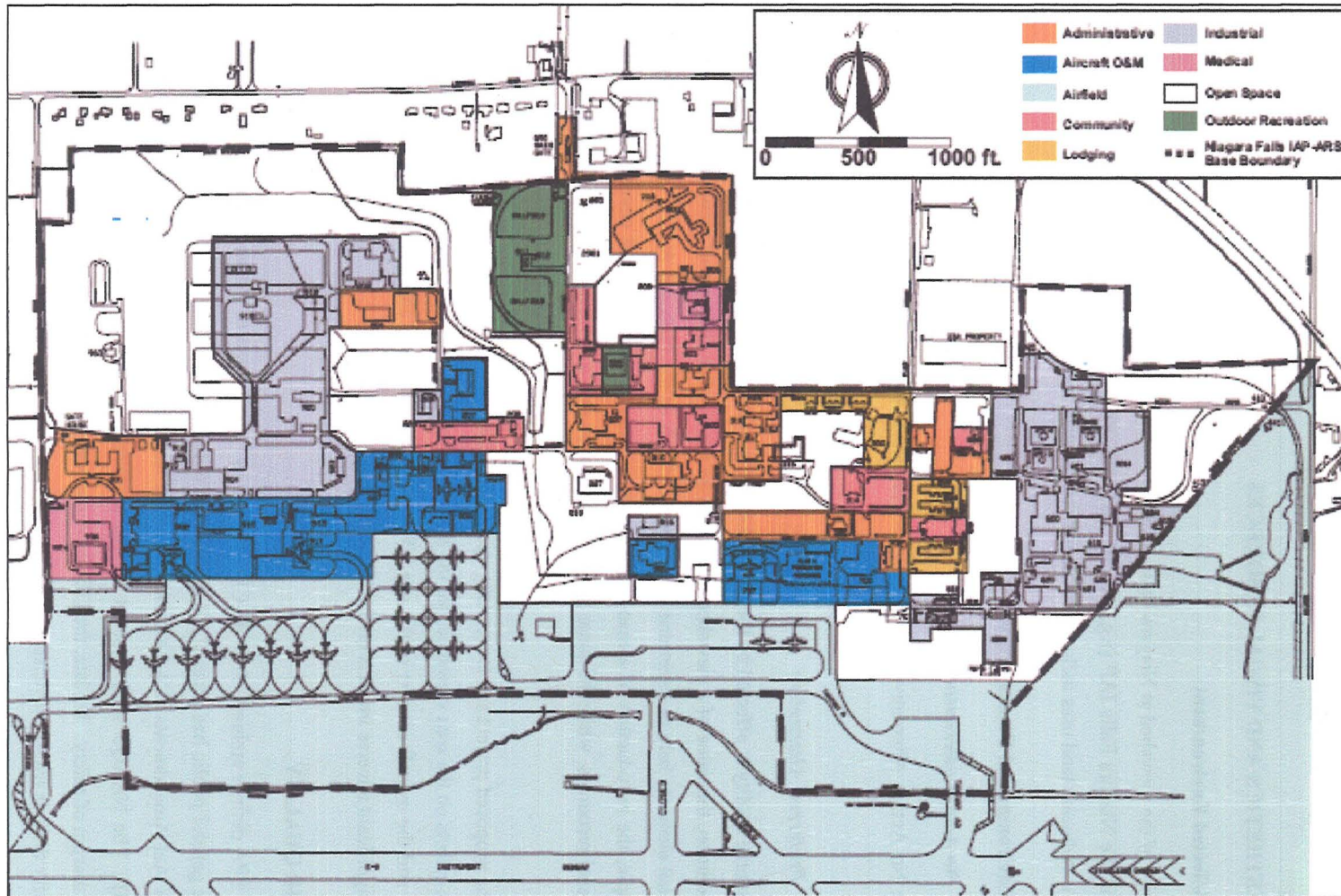
Under the No Action Alternative, there would be no changes in land use at the Proposed Action site.

##### ***4.2.2.2 Preferred Alternative***

Under the Preferred Alternative no significant adverse effects would be expected, though some negligible to minor adverse effects would be expected as some conversion of land use would occur. The proposed AFRC and its associated facilities would be constructed on approximately 18 acres of land in the northwest portion of the Niagara Falls ARS that is currently designated as open space. However, a portion of this open space (the land east of Rubin Way where the AFRC building is proposed) has been used for storing excess clean soils and some construction debris such as concrete, pipes etc. from previous construction projects on the Installation. This material will need to be removed from the project site, and it is currently planned to use as much of this material as possible in landscaping berms around the new site (U.S. Army, 2007). The AFRC facilities would change the current land use from open space to administrative and industrial uses. These new land uses; however, are compatible with the surrounding areas of the Niagara Falls ARS, for Administrative areas exist immediately to the south and Industrial land uses exist immediately to the east of the site. In addition, these land uses are consistent



Figure 4-2. Existing Land Use at Niagara Falls ARS



Source: NFARS, 2004b

with the Installation's General Plan (NFARS, 1998) which proposes the southern portion of the proposed project site as an Administrative area.

### **4.3 AESTHETICS AND VISUAL RESOURCES**

#### **4.3.1 Affected Environment**

The majority of the viewshed at Niagara Falls ARS consists of military buildings and supporting structures for the airfield and the Niagara Falls IAP (e.g. aircraft, taxiways, runways, hangar buildings, service buildings, control tower etc.). Adjacent land uses include low-density residential, agricultural, or open space.

#### **4.3.2 Environmental Consequences**

##### ***4.3.2.1 No Action Alternative***

Under the No Action Alternative, there would be no effects on the viewshed or on the aesthetic values of the region.

##### ***4.3.2.2 Preferred Alternative***

Visual resource quality is affected by the size of key objects, such as height, similarity to surroundings, and visual "fit." In addition, the value of a viewshed is affected by the number and type of viewers and viewer expectations. These visual elements help to determine the potential effects of the Proposed Action on existing visual resources. For example, the introduction of a man-made structure into an entirely natural environment could significantly impact visual resources, while the same structure introduced into a developed area might go largely unnoticed by viewers.

Though the proposed project site is currently open space, the addition of the proposed AFRC complex would have negligible effects on the area viewshed, for the facilities would be consistent with the existing military and airfield functions and the overall context of the site. Therefore, the preferred alternative of the Proposed Action would have no significant adverse impacts on the visual resources of the area.

### **4.4 AIR QUALITY**

The U.S. EPA defines ambient air in 40 CFR Part 50 as "that portion of the atmosphere, external to buildings, to which the general public has access." In compliance with the 1970 Clean Air Act (CAA) and the 1977 and 1990 Clean Air Act Amendments (CAAA), the U.S. EPA has promulgated National Ambient Air Quality Standards (NAAQS). The NAAQS were enacted for the protection of the public health and welfare, allowing for an adequate margin of safety. To date, the U.S. EPA has issued NAAQS for six criteria pollutants: carbon monoxide (CO), sulfur dioxide (SO<sub>2</sub>), particles with a diameter less than or equal to a nominal 10 micrometers (PM<sub>10</sub>), ozone (O<sub>3</sub>), nitrogen dioxide (NO<sub>2</sub>), and lead (Pb). The U.S. EPA promulgated standards for particles with a diameter

less than or equal to a nominal 2.5 micrometers (PM<sub>2.5</sub>) in April 2005; however, PM<sub>2.5</sub> thresholds have not yet been finalized. Areas that do not meet NAAQS are called non-attainment areas.

#### 4.4.1 Affected Environment

Niagara Falls ARS is located in Niagara County, New York. The U.S. EPA classified the Buffalo-Niagara Falls, NY area, which includes the county of Niagara, a basic (subpart 1) non-attainment area for ozone. The NAAQS for ozone are presented in Table 4-1.

**Table 4-1. Ambient Air Quality Standards for Ozone**

Pollutant	Federal Standard	New York Standard
Ozone (O <sub>3</sub> )*: 8-Hour Average	0.08 ppm	0.08 ppm

\* Federal primary and secondary standards for this pollutant are identical.

Sources: USEPA, 2006; NYSDEC, 2007d

To regulate the emission levels resulting from a project, federal actions located in non-attainment areas are required to demonstrate compliance with the general conformity guidelines established in 40 CFR Part 93 Determining Conformity of Federal Actions to State or Federal Implementation Plans (the Rule). Section 93.153 of the Rule sets the applicability requirements for projects subject to the Rule through the establishment of *de minimis* levels for annual criteria pollutant emissions. These *de minimis* levels are set according to criteria pollutant non-attainment area designations. Projects below the *de minimis* levels are not subject to the Rule. Those at or above the levels are required to perform a conformity analysis as established in the Rule. The *de minimis* levels apply to direct and indirect sources of emissions that can occur during the construction and operational phases of the action.

Niagara Falls ARS has completed a General Conformity Rule applicability analysis in order to analyze any impact to air quality. Emissions were estimated for the ozone precursor pollutants NO<sub>x</sub> and volatile organic compounds (VOC). Annual emissions for these compounds were estimated for each of the project actions (construction and operation) to determine if they would be below or above the *de minimis* levels established in the Rule. The *de minimis* levels for a basic ozone area in an ozone transport region are 100 tons per year (TPY) for NO<sub>x</sub> and 50 TPY for VOCs. Sources of NO<sub>x</sub> and VOC associated with the proposed project include emissions from construction equipment, construction crew commuting vehicles, painting of interior building surfaces and parking spaces (VOC only), and stationary heating units (boilers and water heaters).

In addition to evaluation of air emissions against *de minimis* levels, emissions are also evaluated for regional significance. A federal action that does not exceed the threshold emission rates of criteria pollutants may still be subject to a general conformity determination if the direct and indirect emissions from the action exceed 10 percent (%) of the total emissions inventory for a particular criteria pollutant in a non-attainment or maintenance

area. If the emissions exceed this 10% threshold, the federal action is considered to be a “regionally significant” activity, and thus, the general conformity rules apply.

#### **4.4.1.1 Ambient Air Quality Conditions**

Ambient air quality is monitored in Niagara County by stations meeting the U.S. EPA’s design criteria for State and Local Air Monitoring Stations (SLAMS) and National Air Monitoring Stations (NAMS). A monitoring station, located on North Hartland Road, Niagara County, New York has been in operation for measuring the ozone level in the county. The highest and second highest eight-hour values recorded at this station during the period 2002 through 2006 are presented in Table 4-2.

**Table 4-2. Existing 8-hour Ozone Monitoring Data within Niagara County, NY**

Monitoring Station	Year				
	2002	2003	2004	2005	2006
#360631006 – North Hartland Rd	0.102/0.100	0.110/0.106	0.082/0.078	0.099/0.095	0.081/0.079

Ozone values are in parts per million (ppm); 1<sup>st</sup>/2<sup>nd</sup> highest data  
 NAAQS: 8-hour average = 0.08 ppm (0.085 is an exceedance)  
 Source: U.S. EPA, 2007

#### **4.4.1.2 Meteorology/Climate**

Niagara Falls is located in the vicinity of Lake Ontario and Lake Erie, which results in wide seasonal swings of hot and cold temperatures. The climate is humid and precipitation is moderate and distributed evenly throughout the year, with the exception of a dryer winter. Due to the lake effects, wind flow throughout the year is somewhat high. (NFARS, 2004b)

The average temperature at Niagara Falls is 47.6 degrees Fahrenheit (°F). The area experiences moderately warm summers and long cold winters. Summer temperatures average in the low 70s, with temperatures above 90°F occurring occasionally. Winter temperatures range from lows in the mid 20s to highs in the mid 30s. The average rainfall is approximately 40 inches per year and the average snowfall is 67 inches. (NFARS, 2004b)

#### **4.4.1.3 Air Pollutant Emissions at Installation**

Total emissions at Niagara Falls ARS in 2005 are shown in Table 4-3. Due to their minimal annual emissions, Niagara Falls ARS operates under a minor permit.

**Table 4-3. Total Criteria Air Pollutant Emissions at NFARS,**

Pollutant	Emissions (TPY)
PM <sub>10</sub>	0.39
PM <sub>2.5</sub>	0.38
SO <sub>2</sub>	0.03



Pollutant	Emissions (TPY)
CO	3.36
NO <sub>x</sub>	4.48
VOC	1.56
Lead	No Data

Source: NFARS, 2005

#### ***4.4.1.4 Regional Air Pollutant Emissions Summary***

The U.S. EPA calculates the Air Quality Index (AQI) for five major air pollutants regulated by the Clean Air Act: ground-level ozone, particulate matter, carbon monoxide, sulfur dioxide, and nitrogen dioxide. The U.S. EPA collects data daily to determine air quality for the region, and releases it in the form of the AQI, which runs from zero to 300, with zero being no air pollution and 300 representing severely unhealthy air pollution levels. An AQI value between 101 and 150 indicates that air quality is unhealthy for sensitive groups, who may be subject to negative health effects. Sensitive groups may include those with lung or heart disease, who will be negatively affected by lower levels of ground level ozone and particulate matter than the rest of the general public. An AQI value between 151 and 200 is considered to be unhealthy, and may result in negative health effects for the general public, with more severe effects possible for those in sensitive groups. AQI values above 200 are considered to be very unhealthy (Air Watch, 2006).

According to the U.S. EPA's AQI Report for Niagara County, NY, in 2002 the County experienced 18 days where air quality was considered unhealthy for sensitive groups. In 2003, there were 5 unhealthy days for sensitive groups and 2 unhealthy days. In 2004, the area experienced 1 day that was unhealthy for sensitive groups, and in 2005 there were 11 days considered unhealthy for sensitive groups. In 2006, there were zero days recorded above moderate. This data indicates that air quality is improving in the region, but still fluctuates significantly from year to year. (EPA AirData, 2007).

#### **4.4.2 Environmental Consequences**

##### ***4.4.2.1 No Action Alternative***

Implementation of the No Action Alternative would not change current conditions and therefore would not affect the current air quality conditions in the region.

##### ***4.4.2.2 Preferred Alternative***

A General Conformity Applicability Analysis was performed for the Proposed Action. The General Conformity Applicability Analysis estimated the level of potential air emissions (NO<sub>x</sub> and VOC) for the Proposed Action. Appendix C contains a detailed description of the assumptions and methodology used to estimate the potential emissions for the construction and operational phases of the Proposed Action.

Table 4-4 summarizes the total emissions associated with the construction and operation phases of the Proposed Action. Construction related emissions would be temporary and only occur during the 24-month construction period for all buildings; however, a conservative approach was initially employed in the applicability analysis to assure that construction scheduling would not result in higher levels of emissions than predicted. The analysis first assumed that the construction emissions for all of the buildings would occur concurrently over the same one-year period. These results were further added to estimated data for one year of operations, bounding the potential emissions that might result for any overlap between construction and operations emissions.

**Table 4-4. Summary of Annual Emissions**

Activity	Construction Emissions (TPY)		Operation Emissions (TPY)		Combined Emissions (TPY)	
	NO <sub>x</sub>	VOC	NO <sub>x</sub>	VOC	NO <sub>x</sub>	VOC
Heavy Equipment (building/parking)	2.50	0.26			2.50	0.26
Construction Crew Commuting Vehicles	1.04	1.50			1.04	1.50
Painting	NA	0.68			NA	0.68
Stationary Heating Unit (boiler and water heater)			0.307	0.016	0.307	0.016
Daily Commuter Traffic			0.476	0.691	0.476	0.691
<b>Totals</b>					<b>4.313</b>	<b>3.147</b>

The results in Table 4-4 show that the emissions associated with constructing and operating the new AFRC and associated facilities, when compared to the *de minimis* values for this basic ozone non-attainment area, fall well below the *de minimis* levels of 100 TPY for NO<sub>x</sub> and 50 TPY for VOCs, even under the initial conservative assumptions that were employed. As a result, the Proposed Action is not subject to the General Conformity Rule requirements. Appendix D contains a draft Record of Non-Applicability.

Air emissions were also evaluated to determine regional significance. The State Implementation Plan (SIP) for Niagara County is currently in production. As a result, the emissions budgets for NO<sub>x</sub> and VOC for the ozone season are not yet available (Sliwinski, 2007). However, given the small amount of emissions that would be produced under the Proposed Action, and the fact that the majority of emissions would be construction-related and short-term in nature, it is not anticipated that they would make up 10% or more of the available emissions inventory when the SIP for Niagara County is finalized. Therefore, it is anticipated that the Proposed Action would not be regionally significant and would only have negligible adverse impacts on the local and regional air quality.

## 4.5 NOISE

Noise is generally defined as unwanted sound. Sound is all around us; it becomes noise when it interferes with normal activities such as speech, concentration, or sleep. Noise associated with military installations is a factor in land use planning both on- and off-base. In particular, noise associated with airfield and airspace operations can be of concern to on-base personnel and surrounding communities. Noise also emanates from vehicular traffic associated with new facilities and from project sites during construction. Ambient noise (the existing background noise environment) can be generated by a number of noise sources, including mobile sources, such as airplanes, automobiles, trucks, and trains; and stationary sources such as construction sites, machinery, or industrial operations. In addition, there is an existing and variable level of natural ambient noise from sources such as wind, streams and rivers, wildlife and other sources.

Sound is measured with instruments that record instantaneous sound levels in decibels (dB). A-weighted sound level measurements (dBA) are used to characterize sound levels that can be sensed by the human ear. All sound levels analyzed in this EA are A-weighted.

The ROI for the Proposed Action is defined as the Niagara Falls ARS and the immediate surrounding areas in the towns of Niagara and Wheatfield, MA.

### 4.5.1 Affected Environment

#### 4.5.1.1 Noise from Airfield Operations

Aircraft operations (both military and commercial) are the primary source of noise at Niagara Falls ARS. These operations can include in-flight arrivals, departures, and pattern flight operations, as well as pre-flight and maintenance run-up operations on the airfield. Computer models are used to develop day-night average sound level (DNL) noise contours<sup>11</sup> for land use planning purposes based on information about these operations, including the following:

- Type(s) of aircraft
- Types of operations (e.g., arrival, departure, pattern)
- Number of operations per day
- Time of operation
- Flight track(s)
- Aircraft power settings, speeds, and altitudes

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<sup>11</sup> The sound environment around an air installation is typically described using a measure of the cumulative exposure that results from all aircraft operations. The DoD-specified metric used to account for this is the day-night average sound level (DNL). This metric is also endorsed by the U.S. Environmental Protection Agency. Noise contours represent isopleth delineations of specific sound levels.

- Number, duration, and location of pre-flight and maintenance run-ups
- Environmental data (humidity and temperature)
- Topographical features of the area

Noise contours are usually calculated in 5 dBA DNL intervals including DNLs of 65, 70, and 75 dBA. In general, no land use restrictions are required in noise zones below the 65 dBA DNL. Areas located within a DNL range of 65-75 dBA are subject to high noise levels, and noise sensitive land uses (e.g. residential) are not recommended unless sound attenuation or noise level reduction (e.g., sound resistant windows, noise insulation) is included in the use. Areas at or above the DNL contour of 75 dBA are subject to severe noise exposure, and noise sensitive uses are usually incompatible and strongly discouraged. The majority of the Installation is within the DNL 65 dBA noise contour.

#### ***4.5.1.2 Noise from Construction and Demolition***

Instances of increased noise are expected during the short-term construction and demolition phases associated with any projects. Measures that serve to limit or mitigate noise during construction and demolition include limiting activity at project sites to daytime hours; limiting truck traffic ingress/egress at access gates to daytime hours; promoting awareness that producing prominent discrete tones and periodic noises (e.g., excessive dump truck gate banging) should be avoided as much as possible; requiring that work crews seek pre-approval for any weekend activities, or activities outside of daytime hours; and employing noise-controlled construction equipment to the maximum extent possible.

High levels of noise can also affect the health of construction/demolition workers. Application of federal Occupational Health and Safety Administration (OSHA) standards for occupational noise exposure associated with construction (29 CFR 1926.52) is required.

#### ***4.5.1.3 Noise from Facility and Vehicle Operations***

Once facilities are constructed, noise can be generated from facility operations and the vehicles associated with these facilities. Aside from negligible heating, ventilation, and air conditioning (HVAC) related noise, the majority of facilities on military installations do not generate high levels of noise themselves. Some industrial-related facilities may produce noise, and during power outages, operation of emergency generators could cause minor, short-term noise impacts. Most noise is usually created by vehicles associated with these facilities, including organizational vehicles used for training and operations, government and private delivery vehicles, commuter shuttles or buses, and personal vehicles used for commuting purposes. The noise impact created by facility and vehicle operations is rarely considered significant, especially when compared to that generated by aircraft operations.



## **4.5.2 Environmental Consequences**

### **4.5.2.1 No Action Alternative**

No effects would be expected. Implementation of the No Action Alternative would not alter the existing noise at the site being considered under the Proposed Action

### **4.5.2.2 Preferred Alternative**

No significant adverse impacts would result from implementing the preferred alternative, though some negligible to minor adverse impacts from the construction and operation of the AFRC facilities would be expected. There are no sensitive noise receptors on Niagara Falls ARS in proximity to the proposed site that would be affected by the Proposed Action. Off-installation in the general vicinity of the proposed site, there is some low density residential areas that could be subject to minor, short-term adverse impacts from noise generated during the construction of the AFRC. However, noise levels would be insignificant compared to the daily airfield operations, and the effects of construction noise could be reduced by employing best management practices (BMPs) such as confining construction activities to normal working hours and employing noise-controlled construction equipment to the extent possible.

Once the facilities become operational, negligible adverse long-term noise effects would be expected from their day-to-day use. Once facilities are constructed, noise would be generated from facility operations and the vehicles associated with these facilities. Aside from negligible HVAC related noise, the majority of facilities on military installations do not generate high levels of noise themselves. Some industrial-related facilities may produce noise, and during a power outage, emergency generators could run for hours, creating a short-term noise impact. Most noise is usually created by vehicles associated with these facilities including organizational vehicles used for training and operations, government and private delivery vehicles, and personal vehicles used for commuting purposes. Again, however, the noise impact created by facility and vehicle operations would be insignificant compared to the daily airfield operations.

Under the Proposed Action, there would be an estimated increase of approximately 586 personnel relocating to the proposed AFRC complex at the Niagara Falls ARS. However, as a reserve center, the majority of these individuals will be reporting to the site on weekends and not all report on the same weekend. The maximum number of individuals reporting on any given weekend is expected to be approximately 240 and would only contribute negligible amounts of noise to the current environment. The estimated 45 full-time personnel commuting to the site daily would also only contribute negligible amounts of traffic noise to the current noise environment.

## 4.6 GEOLOGY AND SOILS

### 4.6.1 Affected Environment

The ROI is defined as the immediate areas of the AFRC and the associated facilities (OMS/AMSA, DEPMEDS area, MEP area, and POV parking areas), and adjacent areas that may be disturbed or affected during construction activities. Unless otherwise noted, the geology and soils information presented below was obtained from the Niagara Falls ARS Integrated Natural Resources Management Plan (AFRC, 1998).

#### 4.6.1.1 *Geologic and Topographic Conditions*

The topography of Niagara Falls ARS is flat to gently sloping, with elevations ranging from 578 to 600 feet above sea level. The Installation is located in the Niagarian Provincial series, in the eastern lake section of the Central Lowland physiographic province. The Niagarian Provincial series is "richly fossiliferous" with 400 feet of deposits, including dolomite, limestone, shale and sandstone, from diverse environments ranging from non-maritime sandstones to deep water shales.

#### 4.6.1.2 *Soils*

Niagara Falls ARS occupies level to gently sloping land areas dominated by two soils mapping units: Odessa silty clay loam (OdA) and the Lakemont silty clay loam (Lc). These soils formed in glacial material deposited during and shortly after the Ice Age (the Pleistocene epoch). The Odessa soil, a moderately fine textured soil, covers approximately 95 percent of the Installation. It is somewhat poorly drained, has moderately slow permeability, and a seasonably high water table at 6 to 12 inches below the surface. The other 5 percent of the Installation is covered by the Lakemont series soils, a moderately coarse and medium textured soil that is poorly to very poorly drained, has moderately slow permeability at the surface layer, has slow permeability in the subsoil, and a seasonably high water table at or immediately below the surface. The Lakemont soils are located primarily in the southwest portion of the Installation (NFARS, 2004a). The waterholding capacity of both soils is high, and the erosion potential is slight. Approximately half of the area, however, is overlain by pavement and other impermeable structures.

Much of the Installation has been developed since these soil classifications were prepared in 1972 by the Natural Resources Conservation Service (NRCS), formally called the Soil Conservation Service. Many of the native soil profiles have been disturbed and no longer exist. The developed lands were graded and filled and are now classified as Udorthents-Urban Land. A large area of the proposed site east of Rubin Way has been used for storing excess soils and some construction debris such as concrete, pipes, etc. (U.S. Army, 2007). It is difficult to define the characteristics of these man-made lands, but the National Cooperative Soil Survey has identified several possible limitations affecting the development of these soils. These limitations include potentially high seasonal water table shallowness to bedrock, slow permeability, and excessive shale and stone coarse fragment content.

#### **4.6.1.3 Prime Farmland**

The Farmland Protection Policy Act (FPPA) was passed in order to minimize the amount of land irreversibly converted from farmland due to Federal actions. "For the purpose of FPPA, farmland includes prime farmland, unique farmland, and land of statewide or local importance. Farmland subject to FPPA requirements does not have to be currently used for cropland. It can be forest land, pastureland, cropland, or other land, but not water or urban built-up land" (USDA, 2006b). Projects are subject to FPPA requirements if they may irreversibly convert farmland (directly or indirectly) to nonagricultural use and are completed by a federal agency or with assistance from a federal agency.

The Odessa soil found throughout much of Niagara Falls ARS is classified as a Prime Farmland if drained, while the Lakemont soil is classified as Farmland of Statewide Importance (USDA, 2006a).

#### **4.6.2 Environmental Consequences**

##### **4.6.2.1 No Action Alternative**

No effects would be expected. Implementation of the No Action Alternative would not alter the existing geology or soils of the Niagara Falls ARS.

##### **4.6.2.2 Preferred Alternative**

**Geologic and Topographic Conditions** – No impacts would be expected. The Niagara Falls ARS where the AFRC, OMS/AMSA, DEPMEDS area, and MEP area, are proposed to be built are primarily flat and previously disturbed through military use/modification, and would likely only require minor leveling and grading, however, some landscaped berms may be constructed from existing fill material currently located on the site.

**Soils** – No significant adverse impacts within the Niagara Falls ARS would occur from the preferred alternative, though some minor adverse direct impacts would be expected. Some soils at the proposed site would likely be adversely affected by the preparation of the site for construction. Soils would be compacted, minor leveling and grading would be required, and soil layer structure would be disturbed and modified. These impacts are considered minor, given that the majority of soils at the proposed site have been previously disturbed or modified.

Soil productivity (the capacity of the soil to produce vegetative biomass) would decline in the disturbed areas of the Niagara Falls ARS and would be eliminated in those areas within the footprint of the building structures and parking facilities. Disturbed areas outside of the building and parking facility footprints would be reseeded following construction activities, and soil productivity on these sites would return.

Soil erosion and sediment production would be minimized for all construction operations as a result of following an approved sediment and erosion control plan. Prior to construction activities, the U.S. Army, the Niagara Falls ARS or the construction contractor would submit a NOI under proper State Pollutant Discharge Elimination

System (SPDES) procedures, and would prepare a site-specific Storm Water Pollution Prevention Plan (SWPPP) describing specific measures that would be taken during construction.

The sites would also implement an approved storm water management plan to prevent the contamination of on-site or nearby soils as a result of vehicle storage and maintenance or other activities on the sites. All areas outside of the building and parking footprints would be re-graded and re-vegetated (as necessary) following construction activities, and soil erosion and sediment control measures would be included in the site plans to minimize long term erosion and sediment production at the sites.

**Prime Farmland** – No impacts would be expected. The FPPA does not apply to the site for the proposed AFRC and its associated facilities because the land is previously disturbed, and has already been converted to non-farm, urban use. Therefore, it does not meet the definition of farmland provided for by the Act, and thus is not subject to the Act.

## **4.7 WATER RESOURCES**

### **4.7.1 Affected Environment**

The following sections provide a summary of the general condition and character of water resources found at Niagara Falls ARS, as well as more specific descriptions of the water resources in the immediate vicinity of the proposed project site. Unless otherwise noted, the water resources information provided below was drawn from the Niagara Falls ARS General Plan (NFARS, 1998), the Integrated Natural Resources Management Plan (AFRC, 1998), and the Storm Water Pollution Prevention Plan (AFRC, 2006).

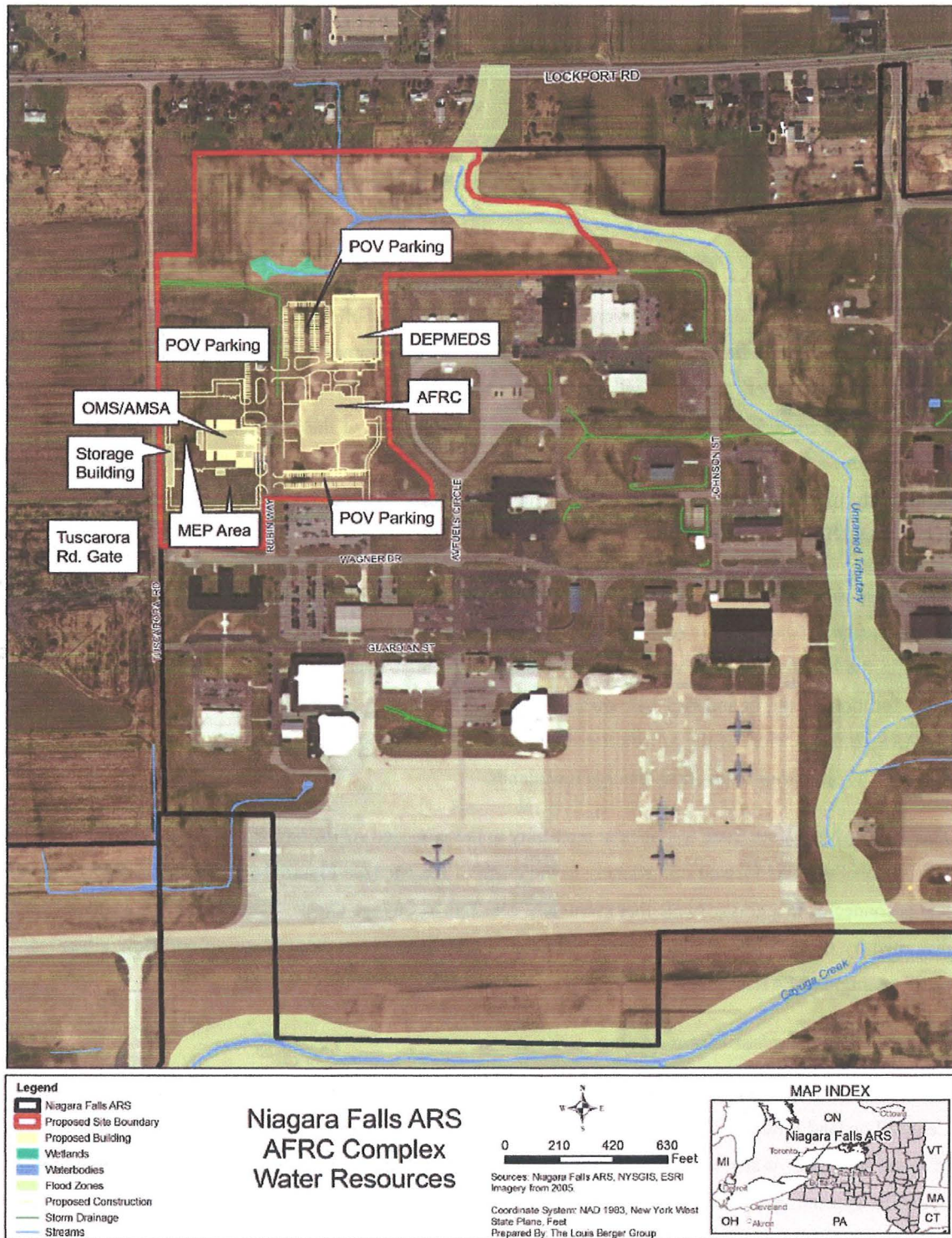
#### **4.7.1.1 Surface Water**

The major surface water features at Niagara Falls ARS are Cayuga Creek and its unnamed tributaries. Figure 4-3 shows the water resources in proximity to the preferred site for the Proposed Action. Cayuga Creek enters the installation from the east at the Walmore Road gate and flows west along the southern boundary of the Installation, passing under Taxiways A3 and A2 before flowing south under the runway. Ultimately, Cayuga Creek drains into the Niagara River approximately 5 miles upstream of the American and Horse Shoe Falls as part of the Lake Erie River Basin. One of the unnamed tributaries of Cayuga Creek originates in the northwest portion of the base and flows south through the center of the installation before draining into Cayuga Creek at Outfall 5. This tributary functions as the primary storm water conveyance for the ARS, draining more than half of the Installation's acreage (see Section 4.12 – Utilities for a full description of the storm water system). The second unnamed tributary flows north to south along the western end of the airfield outside of the cantonment and has minimal impact on the Installation.

**Wetlands** - Certain wetlands are federally protected as a subset of “waters of the United States” under Section 404 of the CWA. The U.S. Army Corps of Engineers (USACE) defines wetlands as “those areas that are inundated or saturated with ground or surface water at a frequency and duration sufficient to support, and that



**Figure 4-3. Water Resources in the Vicinity of the Preferred Alternative Site on Niagara Falls ARS**



under normal circumstances do support, a prevalence of vegetation typically adapted to life in saturated soil conditions.” Wetlands generally include swamps, marshes, bogs, and “similar areas” as defined in 33 CFR 328. Currently, Niagara Falls ARS seeks permission from the USACE prior to vegetative maintenance activities within the jurisdictional wetlands on the installation.

Wetlands are also protected in New York State under Article 24 of the New York Environmental Conservation Law, commonly known as the Freshwater Wetlands Act (the Act or Article 24). Freshwater wetlands, as defined by the Act, are wetland areas 12.4 acres or larger (except under special circumstances). The Act protects wetlands and a 100-foot buffer zone around them.

An emergent marsh/shrub wetland covering 72 acres located west of the Niagara Falls IAP main runway was delineated in 1992 by the New York State Department of Environmental Conservation (NYSDEC). A small portion of this New York State wetland is located on Niagara Falls ARS property. Currently, Niagara Falls ARS has a permit (Permit 90-87-0946) from NYSDEC for management of this wetland area and its 100-foot buffer west of Runway 10L-28R. This permit allows the 914th AW to remove emergent trees and brush and to periodically mow approximately four acres of the wetland and its 100-foot buffer zone within the Installation boundaries (NFARS, 2004a).

Subsequent to a 1997 evaluation, in August 2002 the U.S. Fish and Wildlife Service (USFWS) conducted a survey of the acreage at Niagara Falls ARS and identified 9 federal jurisdictional wetlands covering approximately 37.47 acres on the Installation. The wetlands were mapped in similar locations to those mapped in 1997, though the exact location of the boundaries had shifted slightly. The delineated wetlands were verified by the USACE (NFARS, 2004a). Most of the jurisdictional wetlands are in the southwestern portion of the Installation and are classified as palustrine scrub-shrub/emergent wetlands.

There are no New York State wetlands in proximity to the proposed AFRC site, but there is one small (0.33 acres) jurisdictional wetland located immediately to the north of the site (see Figure 4-3). This is an emergent wetland that is connected to a grassy swale that eventually connects to Cayuga Creek. The soils of this wetland have been disturbed by historic filling and grading. The wetland’s primary function/value is flood flow alteration/storm water retention (NFARS, 2004a)

#### **4.7.1.2 Hydrogeology/Groundwater**

The aquifers of the Lake Erie-Niagara River Basin are primarily carbonate-rock aquifers, characteristic of the Central Lowland Province of western New York. The aquifers typically produce only small to moderate amounts of water to wells. Water is stored and moves mainly in secondary fractures. Minerals in solution are calcite, dolomite, gypsum, and halite, resulting in hard and salty groundwater. Much of the groundwater contains sulfate and chloride ions in excess of 250 milligrams per liter, so the quality of water is poor and deteriorates further with depth. Groundwater must be treated for most uses. Niagara Falls ARS has no active potable water wells (NFARS, 2004b).

#### **4.7.1.3 Floodplains**

The Federal Emergency Management Agency's (FEMA) prepares Flood Insurance Rate Maps to establish actuarial rates for structures based on the risk of flooding. FEMA's maps for the Niagara Falls ARS show that lands adjacent to Cayuga Creek and its tributaries are within the 100-year floodplain. Figure 4-3 illustrates the 100-year floodplain on the Installation in the vicinity of the Preferred Alternative site for the Proposed Action. The 500-year floodplain has not been determined. Given the extent of the floodplains, floodwaters could potentially affect many areas and functions of the Installation, particularly Taxiway A3 and the eastern end of the runway. These areas along Cayuga Creek would both be inundated as the result of a 100-year storm event. The unnamed tributary to Cayuga Creek that runs north-south through the installation precludes development in the immediate vicinity of the Installation's central corridor and northwest corner due to its 100-year floodplain. Cayuga Creek's floodplain also presents a significant constraint to future development within certain geographic areas.

#### **4.7.1.4 Coastal Zone**

The New York State Waterfront Revitalization of Coastal Areas and Inland Waterways Act established direction for the appropriate use and protection of the state's coasts and waterways. The New York State Coastal Policies, which are derived from the Act, are used to guide the State's efforts to create and maintain clean, accessible, and prosperous coastal areas and inland waterways for present and future generations. They are used to guide local governments in the preparation of Local Waterfront Revitalization Programs, to determine the appropriateness of public agency decisions that affect the use and protection of coastal areas and inland waterways, to help set priorities for public and private investment along our coasts and waterways, and they are used by anyone who seeks to improve the management of the coast and inland waterways. New York State's Coastal Area has been divided into four geographic regions: Long Island, New York City, Great Lakes, and Hudson Valley. Niagara Falls ARS is not located in any coastal zone area designated by the New York State Coastal Management Program (NYSDOS, 2006).

### **4.7.2 Environmental Consequences**

#### **4.7.2.1 No Action Alternative**

Implementation of the No Action Alternative would not alter the existing water resources at the site being considered under the Proposed Action. No effects would be expected.

#### **4.7.2.2 Preferred Alternative**

All of the construction for the Proposed Action would fall under the permitting and regulatory requirements of the New York State Standards and Specifications for Erosion and Sediment Control. Prior to construction at the site, a Soil Erosion and Sediment Control Plan and a Storm Water permit will be prepared, submitted, and reviewed for



approval by the NYSDEC. The following describes the impacts of the Proposed Action on each of the water resource areas described above.

**Surface Water/Wetlands** - Under the Preferred Alternative, minor adverse effects on surface waters would be expected. During site preparation, earthworks, and construction activities at the AFRC site, BMPs for erosion and sedimentation controls would ensure that storm water runoff would not cause or exacerbate erosion and potentially impact area waters or the jurisdictional wetland to the north of the proposed site. The Proposed Action site and the surrounding areas are not currently served by storm sewers (U.S. Army, 2007). Therefore, to accommodate the increase in surface runoff from the newly constructed impervious surfaces (e.g. paved parking areas and building rooftops) and meet discharge requirements under the Installation's New York SPDES General Permit for Storm Water Discharges Associated with Industrial Activity, several bio-retention areas would be constructed on the proposed site. The bio-retention areas would be landscaped, infiltration areas which would provide both water quality and quantity control, thus preventing direct discharge of runoff into area surface waters or the adjacent wetland. In addition, any storm water subsequently discharged from the bio-retention areas would be directed into existing drainage channels and not the wetland. The number, size, and placement of the bio-retention areas will be finalized during the final engineering, design, and construction planning for the AFRC complex to ensure that they can adequately accommodate any surface runoff from the site. Though several landscaped berms will be constructed on site from on-site fill material, these berms will not have any impact on storm water flow. Most storm water in the vicinity will infiltrate via non-impervious surfaces or on-site will be directed to the bio-retention areas.

The potential for fuel and lubricant spills at the OMS/AMSA suggests that there may be minor effects associated with the operation of these facilities. However, the OMS/AMSA facility will include floor drains that convey flow through oil-water separators prior to discharging to the sanitary sewer system, minimizing the likelihood of pollutants entering the storm water. Niagara Falls ARS currently operates under a wastewater permit from the Niagara County Sewer Authority. The permit issued by Niagara County Sewer District #1 contains maximum daily and annual discharge volumes for certain non-domestic discharge wastes, including storm water from oil/water separators, and would need to be reviewed/updated as appropriate to accommodate the new facilities. Any pollutants entering the sanitary sewer system from the OMS/AMSA would be treatable at the Niagara County Sewer District #1 plant. As discussed above, Niagara Falls ARS has a New York SPDES General Permit (permit number GP-98-03), and this permit would be reapplied for, or modified, as necessary with the State of New York to accommodate the new facilities. Implementation of both storm water controls as necessary under the Installation's SWPPP and pollution prevention measures as necessary under an approved pollution prevention plan, would ensure that any potential impacts from an increase in storm water runoff at the new facilities would be minor and have no significant adverse impacts.

**Hydrogeology/Groundwater** – Negligible adverse impacts would be expected. Leaks from vehicles and vehicle maintenance operations could pose a threat to ground water sources at Niagara Falls ARS. However, the potential

for spills and leaks would be minimized by existing on-site clean-up procedures and equipment, the installation of oil water separators, and adherence to safety procedures for vehicle maintenance and the operation of equipment. Any construction, demolition, and operation of facilities on the site would continue to adhere to existing applicable ground water protection protocols as required under the Safe Drinking Water Act (1974, with amendments 1986). These measures would ensure that any potential effects would likely be negligible and have no significant impacts.

### **Floodplains**

No impacts would be expected as the proposed AFRC complex would be located outside the 100-year floodplain.

### **Coastal Zones**

No impacts would be expected, for Niagara Falls ARS is not located within a New York State Coastal Zone Management Area, and therefore coastal management measures do not apply.

## **4.8 BIOLOGICAL RESOURCES**

### **4.8.1 Affected Environment**

#### **4.8.1.1 Vegetation**

Niagara Falls ARS lies within the Beech-Maple Forest Section of the Eastern Deciduous Forest Province. This ecoregion is characterized by temperate deciduous forests. It is dominated by tall, broadleaf trees that provide a continuous and dense canopy in summer, but shed their leaves completely in winter. The area that is now Niagara Falls ARS was originally a mixed hardwood forest. The forest was logged during the 1800s and cleared for agricultural uses, such as row crops, small grains, forage grasses, and pasture. Farming and urban development have resulted in very limited forest acreage in the vicinity of the Installation. Most of the Installation is urbanized and the original vegetation has been removed or significantly altered by development, construction, landscaping, and other disturbances. There have been no observations made of any historically significant or unique native vegetative species occurring on Niagara Falls ARS.

The vegetative cover consists primarily of turf grasses, with some shrubs and isolated trees used as landscaping. Grass varieties consist of common introduced species, including: Kentucky bluegrass, tall fescue, orchardgrass, Italian ryegrass, red top, creeping red fescue, colonial bent grass, and timothy. Coniferous and deciduous tree species used in landscaping include blue spruce, maple, scotch pin and ash. Other species exist in limited numbers.

Grassland communities are the predominate habitat on the Installation and support numerous ground-nesting birds, such as the meadowlark, grasshopper sparrow, and upland sandpiper. NYSDEC has indicated that the Installation's grassland habitat has regional importance for supporting a variety of grassland bird species.

Wetland communities, although limited, are another habitat type on the Installation, and are the preferred habitat for the majority of the freshwater wading bird populations in Western New York (AFRC, 1998).

#### **4.8.1.2 Wildlife**

Niagara Falls ARS is relatively small in size, and has a diversity of habitat and land use features that provide limited opportunity for wildlife to inhabit the Installation. In addition, fencing and other land use features, and the amount of industrial and agricultural activities immediately surrounding the Installation further limit this opportunity.

As part of a study from 1997 to 1999 to survey federal- and state-listed threatened and endangered species on Niagara Falls ARS, the USFWS also inventoried the natural communities and habitats on Niagara Falls ARS. Common mammal species found inhabiting the Installation include meadow voles, coyotes, and whitetail deer as well as beaver, woodchuck, muskrat, deer mouse, raccoon, Eastern cottontail rabbit, striped skunk and red fox. The survey also found that the herpatofauna on the Installation consists primarily of wood frogs, northern leopard frogs, garter snakes, painted turtles, and snapping turtles (NFARS, 2001).

Fifty-two bird species were identified during the study. The most abundant native birds inhabiting the area include the red-winged black bird, European starling, gulls, eastern meadowlark, song sparrow, savannah sparrow, rock dove, mourning dove, killdeer, American crow, and great blue heron. During winter months, mallards, black ducks, and Canada geese are also common (NFARS, 2001).

The fisheries habitat on Niagara Falls ARS consists of Cayuga Creek and its unnamed tributaries. Cayuga Creek is a relatively small, low gradient, and warmwater system (NFARS, 2001). Intermittent flow and limited aquatic habitat attribute to the relatively low value of these waterways in relation to their regional ability to support aquatic species. Common fish species found in Cayuga Creek include creek chubs and common shiners with less abundant species including bluntnose minnow, johnny darter, brook stickleback, white sucker, central mudminnow, bluegill, common carp, rock bass, goldfish, pumpkinseed, emerald shiner and largemouth bass. Species collected in the unnamed tributaries include central mudminnow, common shiner, bluntnose minnow, creek chub, and brook sticklebacks (NFARS, 2001).

#### **4.8.1.3 Sensitive Species**

The USFWS has responsibility for the listing of threatened and endangered species, and together with the Federal action agency, they make determinations as to whether formal Section 7 consultation under the ESA is necessary in regards to a Proposed Action. Formal Section 7 consultations are required in the event that there is a possibility of an adverse effect on a threatened or endangered species or on critical habitat.

As mentioned above, the USFWS conducted a survey of threatened and endangered species on Niagara Falls ARS from 1997 to 1999. During the course of the survey the USFWS found no federally listed threatened, endangered, proposed, or candidate plant or animal species, or critical habitat on the Installation (NFARS, 2001). However,

the survey did find and confirm the presence of six New York State-listed bird species on the Installation. These include the grasshopper sparrow (*Ammodramus savannarum*), upland sandpiper (*Bartramia longicauda*), short-eared owl (*Asio flammeus*), northern harrier (*Circus cyaneus*), American bittern (*Botaurus lentiginosus*), and horned lark (*Eremophila alpestris*). The survey also found one eastern box turtle (*Terrapene carolina*), a New York State species of special concern. However, the species was not confirmed and may have been misidentified since it was a long-range observation, and based on habitat conditions on the Niagara Falls ARS, the potential for a protected herpatofauna species to inhabit the property is low (NFARS, 2001).

Table 4-5 lists the protected species which occur on and in the vicinity of the Niagara Falls ARS. The presence of threatened and endangered species on the Installation is identified as one of the following categories: *occurs*, *migrates through*, or *historic range*. The term *occurs* refers to a species inhabiting the Installation on a continuing basis. The term *migrates through* refers to a species inhabiting the Installation on a transitory basis. The term *historic range* is used when Federal and state agencies are unable to confirm the presence of a species on the Installation due to insufficient data, but where historical information indicates that the species previously inhabited or migrated through the area.

**Table 4-5. Threatened and Endangered Species Occurring on or in the Vicinity of Niagara Falls ARS**

Common Name/Scientific Name	Status <sup>1</sup>		Presence on Niagara Falls ARS
	Federal	State	
<b>Birds</b>			
American bittern/ <i>Botaurus lentiginosus</i>	NL	SC	occurs
American Peregrine falcon/ <i>Falco peregrinus anatum</i>	NL	E	migrates through
bald eagle/ <i>Haliaeetus leucocephalus</i>	T	T	migrates through
common nighthawk/ <i>Chordelles minor</i>	NL	SC	migrates through
common tern/ <i>Sterna hirundo</i>	NL	T	migrates through
grasshopper sparrow/ <i>Ammodramus savannarum</i>	NL	SC	occurs
Henslow's sparrow/ <i>Ammodramus henslowii</i>	NL	T	historic range
horned lark/ <i>Eremophila alpestris</i>	NL	SC	occurs
loggerhead shrike/ <i>Lanius ludovicianus</i>	NL	E	migrates through
northern harrier/ <i>Circus cyaneus</i>	NL	T	occurs
piping plover/ <i>Charadrius melodus</i>	T	E	migrates through
red-shouldered hawk/ <i>Buteo lineatus</i>	NL	SC	migrates through
short-eared owl/ <i>Asio flammeus</i>	NL	E	occurs
upland sandpiper/ <i>Bartramia longicauda</i>	NL	T	occurs
vesper sparrow/ <i>Pooecetes gramineus</i>	NL	SC	historic range
<b>Amphibians/Reptiles</b>			
Eastern box turtle/ <i>Terrapene Carolina</i>	NL	SC	occurs

Common Name/Scientific Name	Status <sup>1</sup>		Presence on Niagara Falls ARS
	Federal	State	
Northern cricket frog/ <i>Acris crepitans</i>	NL	E	historic range
<b>Mammals</b>			
Allegheny woodrat/ <i>Neotoma magister</i>	NL	E	historic range
Indiana bat/ <i>Myotis sodalis</i>	E	E	historic range

Source: AFRC, 1998; NFARS, 2004b; NYSDEC, 2007a

Notes:

<sup>1</sup>E – Listed as Endangered

T – Listed As Threatened

SC – NYSDEC Species of Special Concern

NL – Not listed

**Grasshopper sparrow** - The grasshopper sparrow is a widespread species of sparrow with populations in North, Central, and South America. It inhabits sandplain grasslands, pastures, hay fields, and airfields where it feeds primarily on insects (preferring grasshoppers) as well as on weed and grass seeds (MA NHESP, 1986a). It is a small- to medium-sized sparrow (10.8–11.5 cm, mass 14.5–20 g), with a narrow, short tail and a decidedly flat-headed appearance. Adult birds have an unstreaked or faintly streaked, buff-colored throat and breast; brown to reddish upper parts with intervening gray coloration; a pale, cream-colored strip flanked by lateral, dark brown strips on the head; and a yellowish area extending from the bill to below the eye. It requires a patchy grassland habitat of intermediate height with bare ground and bunch grasses such as poverty grass, bluestem, and fescue. Preferred habitat is characterized by relative low stem densities and limited accumulation of ground litter (MA NHESP, 1986a). Nests are well-concealed, and consist of a cup of grass lined with fine grass and occasionally hair. Clutch size consists of three to five eggs that are white with a slight green or brown tinge and reddish or brown spots. The female alone incubates for a period of 11 to 12 days, and young leave the nest 9 days after hatching (CTDEP, 1999).

Grasshopper sparrows have steadily declined as dry, grassy uplands and farms have reverted to forests or have been replaced by developments. As with other ground-nesting birds, high populations of predators like raccoons, skunks and feral or free-roaming housecats have also contributed to this species' decline (CTDEP, 1999).

USFWS surveys observed grasshopper sparrows on several survey plots near the Niagara Falls ARS runway, though none were observed in proximity to the proposed AFRC site (see Figure 4-4). The USFWS inventory report concluded that repeated sightings during the breeding season suggests that breeding activity occurs on the Niagara Falls ARS and that the grassland areas on the Installation provides quality habitat for this species (NFARS, 2001).

**Upland sandpiper** - The upland sandpiper is a slender, moderate-sized shorebird (about 12 inches tall) with a small head; large eyes; short and thick dark brown bill; long thin neck; long yellowish legs; and a relatively long tail. They feed on both insects and grass grain associated with large, open grassy fields. The upland sandpiper

inhabits open expanses of grassy fields, hay fields, and mown grassy strips adjacent to runways and taxiways of airports and military bases (MA NHESP, 1986b). Both sexes incubate four camouflaged eggs which are laid in a grass-lined nest on the ground for a period of 21 to 28 days. Young birds fledge 32 to 34 days after hatching. They prefer to nest in tall, herbaceous vegetation on open grasslands, meadows, prairies, and wetland clearings. Following the breeding season, the upland sandpipers gather into flocks before departing to their wintering grounds in South America. The upland sandpiper migrates from its wintering habitat in South America during mid-April to early May to breed. It breeds across North America from Maine to central Canada and Alaska, and from Maryland to Oklahoma and Colorado.

USFWS surveys observed upland sandpipers on several survey plots near the Niagara Falls ARS runway, though none were observed in proximity to the proposed AFRC site (see Figure 4-4). Though no nests have been found, repeated sightings during the breeding season suggests that breeding activity occurs on the Niagara Falls ARS and that the grassland areas on the Installation provides quality habitat for this species (NFARS, 2001).

**Short-eared owl** – Short-eared owls are medium size owls with small ear tufts that appear as to ridges along the top of the head. They have round, beige facial disks similar to those of barn owls. When perched the wings extend beyond the tail and in flight the undersides of the wings show dark markings on the wrists and primary tips. Short-eared owls are the most diurnal of all the northeaster owls. They are most often observed in the late afternoon and at dawn or dusk (NYSDEC, 2007b). The preferred food item of the short-eared owl is the meadow vole, though they also prey upon other small mammals and birds such as sandpipers, killdeer, and horned lark (NFARS, 2001).

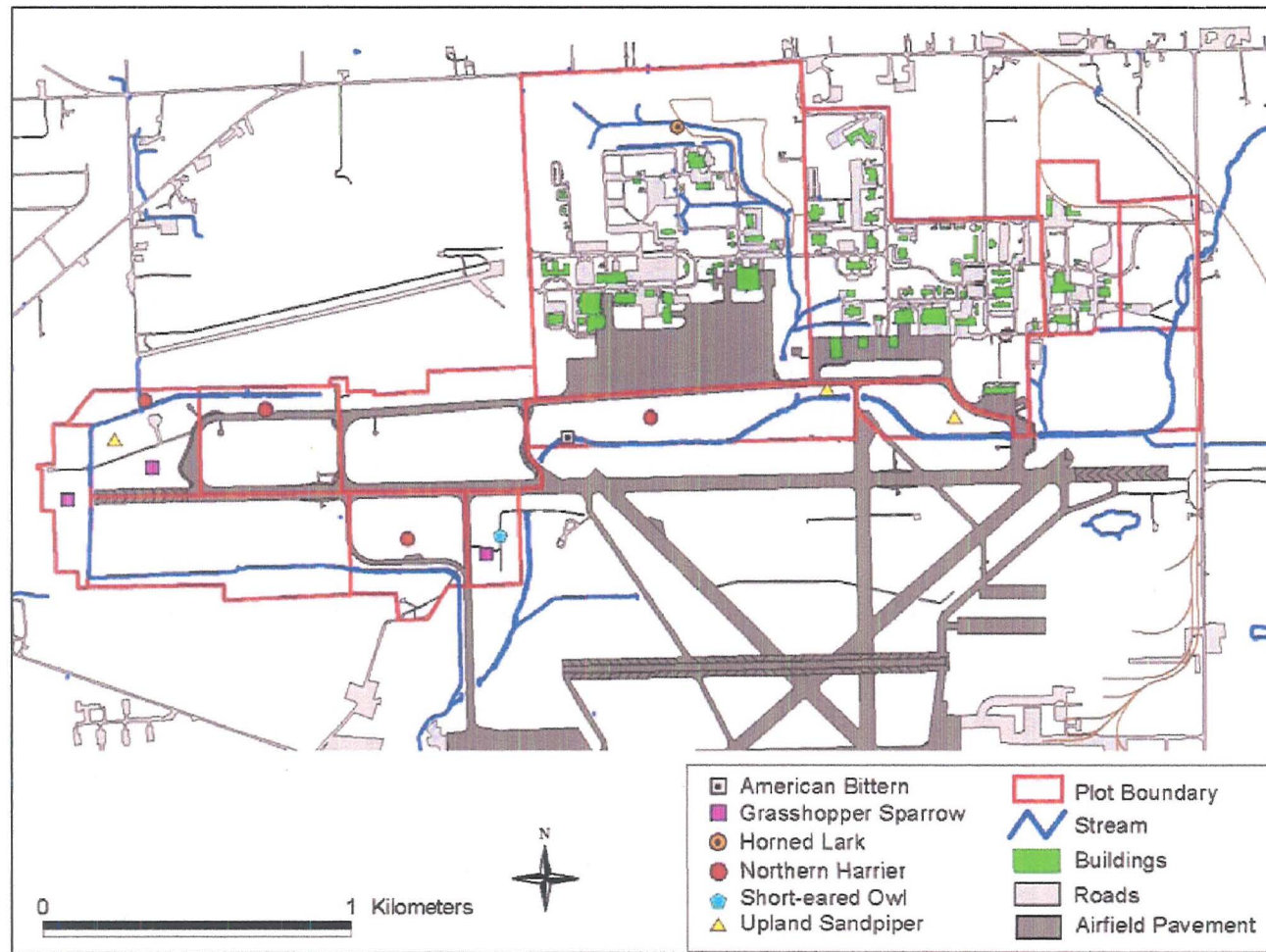
Short-eared owls prefer open habitat with substantial areas of suitable resting and nesting cover and are most often found in inland or coastal marshes, meadows, old fields, pastures, and airports. Additional habitat requirements include nearby areas with high productivity of small mammals. The species have a rather large territory, with studies in Massachusetts suggesting a mean territory size of 136 acres. Upland sites with vegetation (grasses, sedges, and forbs), less than 0.5 meter high, is preferred for the nesting environment, while wintering habitat conditions include appropriate shelter from the elements and close proximity to hunting grounds (NFARS, 2001).

The breeding season for the short-eared owl usually begins in late May. The shallow, unlined nest is built on the ground and sheltered by tall grass, reeds or bushes. The 4 to 8 eggs are short, oval, smooth and non-glossy. They are laid at 2-day intervals. The female incubates the eggs, beginning with the first egg, for 24 to 28 days. After hatching, the female tends the young while the male brings food. The young owls leave the nest 12 to 17 days after hatching, but they do not fly until 10 days later (NYSDEC, 2007b).

USFWS surveys observed six short-eared owls in 1998 in one survey plot near the runway, though none were in proximity to the proposed AFRC site (see Figure 4-4). These were the only sightings of this species during the



Figure 4-4. Locations of State-listed Threatened and Endangered Bird Species on Niagara Falls ARS



Source: NFARS, 2001



survey; however, additional winter sightings have been reported on and adjacent to the Niagara Falls ARS. The USFWS inventory report suggested that the short-eared owl utilizes the Niagara Falls ARS, as well as adjacent lands, for over-wintering or migratory stop-over habitat (NFARS, 2001).

**Northern harrier** – The northern harrier, formerly known as the marsh hawk, is a 16-24 inch (41-61 centimeter), slender-bodied hawk that has a long tail and wings, long yellow legs, distinct facial disks and a conspicuous white rump patch. The northern harrier hunts primarily from air and may cover up to 100 miles per day. Its prey, mostly rodents and small birds, is detected using extremely keen hearing (NYSDEC, 2007c).

Northern harriers usually return to the same area to nest. The nest is a flimsy structure built of sticks and grass on the ground. It can be found in dense vegetation or situated in a slightly elevated position. The clutch averages 5 eggs and incubation lasts 30 to 32 days and begins before the last egg is laid. The young fledge in 30 to 41 days. The young are brooded by the female, with the male bringing food and passing it to the female in mid-air. Young harriers can fly about 30 to 35 days after hatching. In years when prey is abundant harrier clutches are larger and reproductive success is higher (NYSDEC, 2004c).

Northern harriers are associated with wetlands, fresh and salt-water marshes, swamps and bogs, wet meadows, hay meadows, logged or burned woodlands, and tundra. Breeding occurs in marshes, grasslands, meadows and cultivated fields, and while coastal areas are preferred, inland areas are used when coastal habitats are limited (NYSDEC, 2007c).

Historic populations of northern harriers were considered abundant and widespread. However, declines have been observed in recent decades. Declines were primarily due to a loss of breeding habitat and the effects of pesticides. Reforestation, filling in of wetlands, changes in land use, and urban and industrial development in coastal areas all contributed to habitat losses (NYSDEC, 2004c). An abundance of prey (i.e. meadow voles) at Niagara Falls ARS provides the northern harrier with the supplementary mainstay to remain on the property (NFARS, 2001).

USFWS surveys observed the northern harrier on survey plots near the runway, though none were near the proposed AFRC site (see Figure 4-4). The USFWS inventory report concluded that the northern harrier utilizes the Niagara Falls ARS for foraging; however, no nesting on site was confirmed (NFARS, 2001).

**Horned lark** - The brownish horned lark is best identified by its very distinctive head pattern: black "horns" (feather tufts), a white or yellowish face and throat, a broad, black stripe under the eye, and a black bib. The female is duller overall than the male and the horns are less prominent. In flight, the most obvious characteristic is the mostly black tail with white outer feathers. In winter plumage, the black areas on the head and breast are partially obscured by pale edgings. The horned lark is larger than a sparrow (CTDEP, 1999).

The horned lark prefers open areas rather than grasslands and is specific to barren land such as plowed fields, over-grazed pastures, tundra, and shores (NFARS 2001); however, breeding has also been documented in grassland areas at airports (CTDEP, 1999). Breeding usually begins in mid-June. The cup-shaped nest is built on

the ground in a shallow depression, usually in the shelter of a plant tuft or stone. The nest is made of dry grass and plant stems, loosely put together, with a fine inner lining of plant down and hair. Small pieces of peat or pebbles may be assembled around the nest or on one side of it. Four smooth, glossy eggs are laid at daily intervals and incubated by the female for 10 to 14 days. After hatching, the young have brown skin and long, pale down. They are cared for by both adults and leave the nest after 9 to 12 days (CTDEP, 1999).

Horned lark populations have steadily declined as dry, open uplands have reverted to forests or have been destroyed by development. As with other ground-nesting birds, high populations of predators, such as raccoons, skunks, and housecats, have also contributed to the decline of this species (CTDEP, 1999).

USFWS surveys observed three horned larks during mammal surveys in a survey plot at the northern portion of the Installation, northeast of the proposed AFRC site (see Figure 4-4). This was the only sighting of a sensitive bird species in a survey plot near the Proposed Action; however, the USFWS inventory report concluded that this limited sighting indicates infrequent, transient use by the species (NFARS 2001).

**American bittern** – The American Bittern is a medium-sized brown, streaked ground-dwelling heron which spends most of its time hidden among marshland vegetation. It inhabits freshwater marshes, meadows, fens and bogs dominated by emergent vegetation such as cattails, bulrushes, sedges, and grasses. It may also occur in brackish wetlands. The secretive American bittern may be best known for its habit, when it feels threatened, of standing upright with its bill pointed skywards, in order to camouflage itself among the reeds, occasionally swaying from side to side with the vegetation as if blown by the wind (MA NHESP, 2006).

American bitterns usually nest in marshes across the northern United States and southern Canada, though they may also nest in grassy upland fields adjacent to wetlands. They winter across the southern United States and down through Mexico and Central America. Males appear to be territorial throughout the breeding season, and remain in the nest-site vicinity. American bitterns build nests either on the ground in dense vegetation or on a platform about one foot above the water. The nests are made of dead reeds, cattails, grasses and sedges. Clutch sizes are generally three to five buff- or olive-brown eggs. Young hatch in about 24 and leave the nest after another two weeks. They are often seen stalking along shorelines and marshes where they prey on frogs, fish, small snakes and eels, salamanders, crayfish, fish, and occasionally mice and grasshoppers caught on visits to open fields (MA NHESP, 2006)).

Surveys for the USFWS inventory observed the American bittern once in a survey plot near Cayuga Creek (see Figure 4-4). The USFWS inventory report concluded that this limited sighting indicates infrequent, transient use of the Installation by the species (NFARS, 2001).

#### **4.8.1.4 Wetlands**

See Section 4.7 – Water Resources for a full description of the delineated wetlands found on Niagara Falls ARS. There are no New York State designated wetlands located in proximity to the proposed AFRC site; however, there

is a small (approximately 0.33 acre) jurisdictional wetland immediately to the north of the proposed AFRC layout (see Figure 4-5). This is an emergent wetland with plant species identified as redtop, bristlebract sedge, and soft rush. These plants are all facultative wetland species, meaning they occur more in wetlands than in uplands. During its delineation, the USFWS concluded that this wetland's small size; the high level of disturbance (primarily mowing); and its close proximity to buildings, parking areas, and recreation areas reduces its ability to provide quality wildlife habitat (NFARS, 2004a).

**Figure 4-5. View of Jurisdictional Wetland from Western End Looking East (NFARS, 2004a)**



Note: Blue stakes mark outline of the wetland, and the proposed AFRC site is off to the right (south) of the photo

## **4.8.2 Environmental Consequences**

### **4.8.2.1 No Action Alternative**

Under the No Action Alternative, no impacts on biological resources would be expected.

### **4.8.2.2 Preferred Alternative**

**Vegetation** – Negligible adverse impacts would be expected. Proposed construction activities would occur within previously disturbed, maintained areas with a highly modified and disturbed landscape. The proposed project site encompasses approximately 18 acres of undeveloped land consisting of a few isolated landscaping trees and grassy areas, both mowed and unmowed. The area east of Rubin Way where construction would take place has been used for storing excess soils and some construction debris such as concrete, pipes etc. from previous construction projects on the Installation and provides little wildlife habitat value. The area west of Rubin Way where the OMS/AMSA and MEP area would be constructed consists mostly of mown lawns, with a small portion, approximately 0.25 acres, being hardscape (Building 960 and its associated POV parking area). No native plant communities or quality wildlife habitat would be disturbed in this area, and though approximately 4 acres of vegetation would be permanently lost, since the vegetation resources are common introduced species and are not a unique or important habitat, the impacts would not be significant. Once construction is complete, some minimal habitat value would be regained through landscaping and the creation of several landscaped bio-retention areas for storm water management.

**Wildlife** – Negligible adverse impacts would be expected. Extensive development of the Niagara Falls ARS has left minimal habitat for wildlife in areas away from the open grasslands and wetlands immediately surrounding the airfield. Furthermore, most of the area associated with the Proposed Action consists of previously disturbed, landscaped, paved, or mowed lands that provides marginal habitat for wildlife. Therefore, only common species of birds and mammals that have adapted to urban/industrial habitat would likely be displaced from the Proposed Action site. Wetlands typically provide habitat for a diverse array of wildlife; however, due to the small size of the jurisdictional wetland to the north of the site; its disturbed nature from mowing; and its proximity to existing buildings, parking areas and recreation areas its habitat value has already been greatly reduced and would not be significantly impacted by the proximity of the proposed AFRC complex. After construction is complete, and depending upon the size and location of them, the landscaped bio-retention areas may provide some minimal habitat value for wildlife.

**Sensitive Species** – Implementing the Preferred Alternative would not result in any significant adverse impacts to any threatened or endangered species. No critical habitat or federal threatened or endangered species are known to occur on Niagara Falls ARS, and no state-listed species are known to occur in the area of the preferred alternative site for the AFRC complex.



The USFWS surveys conducted from 1997 to 1999 did not document any federally-listed threatened or endangered species within the boundaries of Niagara Falls ARS, nor did they document any critical habitat. Furthermore, the USFWS concluded that based on habitat conditions on Niagara Falls ARS, the potential for a protected mammal, fish, or herpatofauna species to inhabit the Installation is low (NFARS, 2001). The USFWS was contacted via letter dated 30 April 2007 (see Appendix A) to request confirmation that no federally listed threatened or endangered species occur in the proposed project area, and that no additional or formal consultation is required under Section 7 of the ESA. The USFWS responded by letter dated 5 June 2007 (see Appendix A) stating that "Due to increasing workload and reduction in staff, we are no longer able to respond to endangered species list requests in a timely manner." and referred to their website for a county list of endangered, threatened, proposed, and candidate species as well as an official list request response. A list of federally-listed species for Niagara County was obtained from the USFWS website as well as an official response letter (see Appendix A). According to the USFWS, the bald eagle (threatened) and the Eastern prairie fringed orchid (*Platanthera leucophaea*) (threatened) are federally listed species known or likely to occur in Niagara County, NY. As noted in Table 4-5, the bald eagle is only a transient species at Niagara Falls ARS, and with few trees, the Installation is not ideal habitat for the bald eagle. The Eastern prairie fringed orchid is noted as *Historic* on the USFWS Niagara County list. According to the *Determination of Threatened Status for Eastern and Western Prairie Fringed Orchids* (50 CFR Part 17) and the USFWS' species profile (USFWS, 2007), the Eastern prairie fringed orchid was historically found in New York, but is currently no longer found in the state, and no critical habitat has been designated for the species. In addition, the 1997-1999 USFWS surveys did not document any Eastern prairie fringed orchids on Niagara Falls ARS. Therefore, the Proposed Action would not adversely affect any federally-listed threatened, endangered, proposed, or candidate species.

The location of the Proposed Action west of Rubin Way is potentially suitable habitat for the state-listed upland sandpiper and grasshopper sparrow. However, these species prefer pastures and hay fields and the mowed vegetation of this area of the Proposed Action, combined with its proximity to roads and buildings would not be considered a high-value habitat. The NYSDEC was contacted via letter dated 30 April 2007 (see Appendix A) to obtain confirmation that the Proposed Action would not adversely affect any state listed rare, threatened, or endangered species. The NYSDEC responded by letter dated 25 May 2007 (see Appendix A) and confirmed that no endangered or threatened species or sensitive habitats are known on the proposed AFRC site.

**Wetlands** – No significant adverse effects would be expected. The jurisdictional wetland to the north of the proposed project currently provides little habitat value due to its small size, its disturbed nature (mostly mowing), and its proximity to existing buildings, parking areas, and recreation areas. The proposed layout for the project has been sited so as to not require filling or disturbing any portion of the wetland. Prior to construction, the U.S. Army (as tenant), Niagara Falls ARS, or the construction contractor would submit an NOI under proper NPDES procedures and would prepare a tailored, site-specific SWPPP. The SWPPP would describe specific control measures that would be implemented during construction of the AFRC complex to reduce and control siltation or

erosion impacts to the wetland and surrounding areas. Such measures might include silt fencing, straw bales or other BMPs.

In addition, the site plan for the AFRC complex includes several bio-retention areas where storm water runoff from the site would be directed to prevent it from directly or indirectly (by altering the hydrology of the area) impacting the wetland. The bio-retention areas would be landscaped, infiltration areas which would provide both water quality and quantity control. Any storm water subsequently discharged from the bio-retention areas would be directed into existing drainage channels and not the wetland. The number, size, and placement of the bio-retention areas would be finalized during the final engineering, design, and construction planning for the AFRC complex.

## **4.9 CULTURAL RESOURCES**

This section assesses impacts on buildings, sites, structures, districts, and objects eligible for, or included in, the National Register of Historic Places (NRHP); cultural items as defined in the Native American Graves Protection and Repatriation Act (NAGPRA) of 1990; Native American sacred sites for which access is protected under the American Indian Religious Freedom Act (AIRFA) of 1978; archaeological resources as defined by the Archaeological Resources Protection Act of 1979; and archaeological artifact collections and associated records as defined by 36 CFR Part 79.

### **4.9.1 Affected Environment**

The ROI is the geographic area or areas within which an undertaking may directly or indirectly cause alterations in the character or use of historic properties, if any such properties exist. The ROI considered for this project includes the area immediately surrounding the proposed site for the AFRC and support facilities on the Niagara Falls ARS, taking into consideration the immediately surrounding built environment within the viewshed of the project.

#### ***4.9.1.1 Prehistoric and Historic Background***

The following information is excerpted from the *Final Cultural Resource Management Plan (CRMP)* for Niagara Falls, ARS (AFRC, 1996).

The earliest human occupation of western New York probably began around 10,000 to 9,000 B.C. The CRMP provides a thorough overview of prehistoric occupation of the region. Historic evidence for human occupation of the Niagara Falls area begins in the early 1500's when European explorers first entered the area and recorded their experiences. Prior to the U.S. Military's arrival, Niagara County was an important agricultural area and the land where the Niagara Falls ARS is located was once occupied by small farms which were acquired and demolished by the United States government in 1942.

The military history of the Niagara Falls ARS began in 1942, when the municipal airport at Niagara Falls leased 468 acres of land to the U.S. government for use by the Army Air Corps. In 1946, 132.2 acres were returned to the city.

In 1948, the 136th Fighter Interceptor Squadron (FIS) of the New York Air National Guard (NYANG) was established and occupied an area directly opposite the Bell Aircraft Corporation Plant. In 1952, the 136th FIS was called to active duty and assigned to the Air Defense Command. At the same time, the 76th Air Base Squadron (ABS) was activated at Niagara Falls to perform "housekeeping" duties to allow the 136th FIS more freedom to perform its mission of around-the-clock defense. In 1953, the 518th Air Defense Group (ADG) replaced the 76th ABS, and the 47th FIS replaced the 136th FIS. Two years later, Air Force reactivations brought the 15th Fighter Group (FG) out of mothballs to Niagara Falls to replace the 518th ADG.

In 1959, the North American Defense (NORAD) System CIM-10B BOMARC missile was brought to the base, and the 35th Air Defense Missile Squadron was activated to maintain the BOMARC missiles. After the missile area deactivation in the late 1960s, the 107th Tactical Fighter Group (TFG) NYANG became the tenant organization, occupying the western portion of the base. In 1960, the 15th FG was deactivated, and the 4621st Support Group began operations at the base. In 1964, the 4621st was designated the 4621st Air Base Group (ABG).

In 1970 and 1971, the 49th FIS was the base host after the 4621st ABG was deactivated. In 1971 the 914th TAG Air Force Reserve (AFRES) assumed command. In 1994, the 914th TAG was designated the 914th AW AFRES.

#### ***4.9.1.2 Status of Cultural Resource Inventories and Section 106 Consultations***

***Cultural Resource Inventories*** - An Installation-wide Stage 1 archaeological survey was conducted from June to August 1998. The February 7, 2000 survey report (Pratt and Huth Associates LLP, 2000) noted that none of the historic (modern) artifacts identified were considered to be culturally important. The report also recommended that no further cultural resources investigations were necessary on the Niagara Falls ARS property. Evaluated under the project review number 95PR2445 and by letter dated May 12, 2000, the New York State Office of Parks, Recreation and Historic Preservation (NYSHPO) concurred with the conclusions of the Stage 1 survey report that there are no archaeological sites at Niagara Falls ARS and stated that "future projects at Niagara Falls ARS will not require any additional archeological investigations." (NYSHPO, 2000).

A Cold War Resources Survey and Evaluation of Niagara Falls ARS was completed in 2005 (NFARS, 2005). The survey determined that properties associated with three themes relating to the Cold War historic context exist at Niagara Falls ARS. However, only one of these themes, the Strategic Missile Defense theme involving the construction of the BOMARC B missile site at Niagara Falls ARS, was determined to meet the National Register Criteria Consideration G for exceptional importance to the Cold War historic context. The survey found five buildings and one structure remaining from this theme at Niagara Falls ARS. However, the evaluation of exceptional importance of these remaining buildings to the Cold War historic context revealed that they no longer



retained enough integrity of location, design, setting, feeling, workmanship, or materials to convey the context's historic significance. Therefore, there are no Cold War structures with historic context on Niagara Falls ARS.

In addition to the Cold War Resources survey, a recent Historic Resources Survey and Evaluation at Niagara Falls ARS was conducted (NFARS, 2007). This draft report has not yet been approved by the NYSHPO, but the survey did not identify any buildings, structures, sites, or objects at Niagara Falls ARS that were considered eligible for listing in the NRHP.

There are no NRHP-listed or eligible properties within or immediately adjacent to, the proposed AFRC site. The nearest NRHP-listed site is the Town of Niagara District School #2, which is located approximately 1,000 feet to the north across Lockport Road (see Figure 4-6).

**Section 106 Consultations** – An Intergovernmental and Interagency Coordination letter was sent to the NYSHPO on April 30, 2007 describing the proposed activities at the Niagara Falls ARS (Appendix A). In response to the correspondence, the NYSHPO indicated that the Proposed Action would not impact any archaeological or historic sites and that no further studies/investigations would be required (Peckham, 2007) (See Appendix A).

#### **4.9.1.3 Native American Resources**

The Niagara Falls ARS is located in the historic territory of the Erie Indians. The nearest Indian Reservations are the Tuscarora (Seneca) Reservation, located approximately 15 miles away, and the Tonawanda (Seneca) Reservation, located approximately 30 miles away (U.S. Army, 2001). To date, no traditional cultural properties or Native American sacred sites have been recorded at Niagara Falls ARS. The current Niagara Falls ARS CRMP (AFRC, 1996) contains a complete list of laws and procedures relating to Native American patrimony which would be implemented in the event of an unanticipated discovery.

#### **4.9.2 Environmental Consequences**

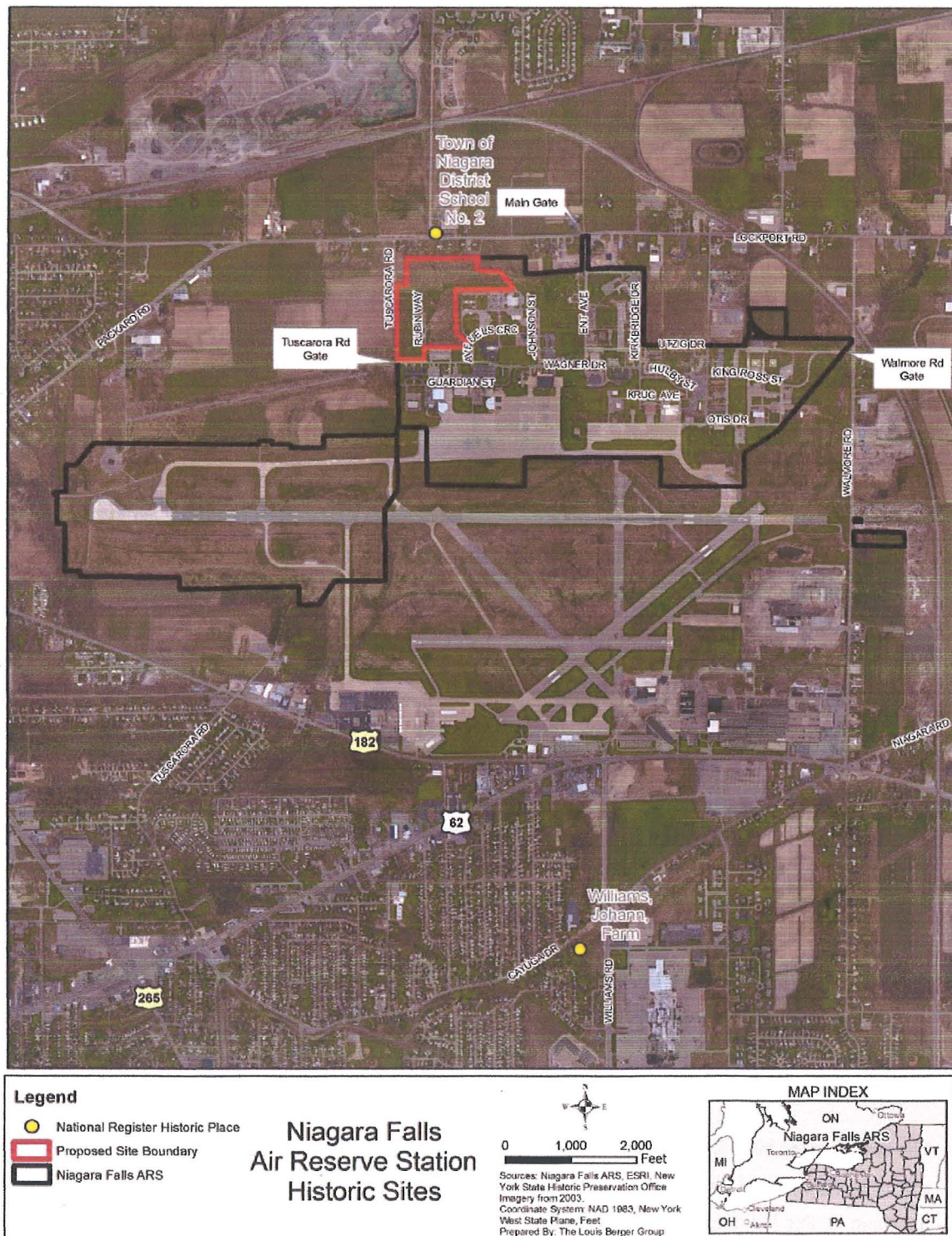
##### **4.9.2.1 No Action Alternative**

There would be no effects on cultural resources under the No Action Alternative.

##### **4.9.2.2 Preferred Alternative**

**Archaeological Resources** – No adverse impacts would be expected as a result of implementing the Proposed Action under the preferred alternative. During the 1998 installation-wide Stage 1 archaeological investigation for Niagara Falls ARS no testing was done for the areas east or west of Rubin Way where the AFRC and associated facilities are proposed. The survey report described areas not tested as “too highly disturbed”, and also indicated that the area east of Rubin Way was not tested due to the high degree of subsurface utilities and other excavations (Pratt and Huth Associates LLP, 2000). Despite these areas not being tested, the February 7, 2000 survey report concluded that no significant archaeological or historic sites exist within the Installation. By correspondence

Figure 4-6. Historic Sites in Proximity to the Niagara Falls ARS



dated May 12, 2000 the NYSHPO concurred with the conclusions of the report and stated that “future projects at NFARS will not require any additional archeological investigations.” (NYSHPO, 2000).

Given the previously disturbed nature of the proposed site and the fact that no significant archaeological resources exist on Niagara Falls ARS, including areas immediately adjacent to the proposed site, no impacts to archaeological resources would be expected. In response to the Intergovernmental and Interagency Coordination letter dated April 30, 2007, the NYSHPO concurred that the Proposed Action would not adversely impact any archaeological resources and reconfirmed that no further studies/investigations are necessary (Peckham, 2007).

If any unexpected archaeological resources are found during the construction of the proposed AFRC facilities it would potentially result in minor adverse impacts. However, procedures for handling unexpected discoveries of historical resources during construction are outlined in the Niagara Falls ARS CRMP and would be adhered to, thus minimizing any potential adverse impacts. The procedures are summarized as follows: if there is an unanticipated discovery of historic properties during construction, contractors shall stop or redirect work until a qualified archeologist can evaluate the find, and notify the Base Contracting Officer (who in turn shall immediately notify the 914 MSG/CEV Cultural Resources Manager). Examples of historic properties include, but are not limited to; (a) intact or fragmentary artifacts of human manufacture such as tools, weapons, pottery, basketry, and textiles; (b) human remains such as bone, teeth, mummified flesh, burials and cremations; and (c) components of structures and features such as houses, mills, piers, fortifications, raceways, earthworks and mounds. Should the unanticipated discovery involve human remains, construction activities shall stop in the vicinity and the Base Contracting Officer shall be notified immediately (AFRC, 1996).

**Historical Architecture** – No adverse impacts would be expected as a result of implementing the Proposed Action under the preferred alternative. Building 960 is located on the west side of Rubin Way and would need to be demolished in order to implement the Proposed Action. The recent historic resources survey conducted at Niagara Falls ARS concluded there are no historic resources listed or eligible for listing on the NRHP on Niagara Falls ARS. Specifically regarding Building 960, the survey concluded that the building/property “is not associated with events that have made a significant contribution to the broad patterns of history (Criteria A); is not associated with the lives of significant persons (Criteria B); does not embody the distinctive characteristics of a type, period, method of construction, or the work of a master, and does not possess high artistic value (Criteria C); and it has not yielded and is not likely to yield information important in history or prehistory (Criteria D).” (NFARS, 2007).

The nearest listed historic site to the proposed AFRC site is the Town of Niagara District School #2 on the north side of Lockport Road (Figure 4-6). The proposed AFRC facilities would be located approximately 1,000 feet to the south of this building. Several private residences with mature trees on the south side of Lockport Road provide a visual buffer between the historic school building and the proposed facilities. Due to the distance from the nearby listed historic site, the existence of adjacent land uses (industrial and administrative) and facilities on Niagara Falls ARS similar to the proposed facilities, and the visual buffer provided by the private residences and



mature trees, no effects on listed historic resources would be expected. In response to the Intergovernmental and Interagency Coordination letter dated April 30, 2007, the NYSHPO concurred that the Proposed Action would not adversely impact any historical resources and reconfirmed that no further studies/investigations are necessary (Peckham, 2007).

Based on the conclusions of these studies and correspondence with the NYSHPO, the Proposed Action within the Niagara Falls ARS would not have any significant adverse effects on archaeological or historic resources.

#### **4.10 SOCIOECONOMICS**

The Affected Environment and Environmental Consequences sections of the Socioeconomics resource area of this EA are presented in limited detail. This is due to the fact that there will be no new incoming personnel relocating from outside the ROI. Because there would be no change in the baseline population, resources that are normally addressed in a Socioeconomics resource section that are not evaluated in this EA include *Housing* and *Quality of Life*.

##### **4.10.1 Affected Environment**

The socioeconomic ROI for the Proposed Action consists of Niagara County, NY. This county comprises the area in which the predominant socioeconomic effects of the Proposed Action would take place. The geographical extent of the ROI is based on the residential distribution of the installation's military, civilian, and contracting personnel, and the location of businesses that provide goods and services to the installation and its employees.

The baseline year for the socioeconomic analysis is 2006, although much of the economic and demographic data for the ROI are only available through the years 2004 and 2005. The descriptions of the affected environment are based on the most recent data available to accurately reflect the current economic and social conditions of the ROI. Due to the fact that a very small number of personnel would be coming to the installation, and would not be relocating from outside the ROI, this section provides a very brief overview of regional economic activity and demographic data and trends.

##### **4.10.1.1 Economic Development**

###### **4.10.1.1.1 Regional Economic Activity**

The ROI's regional economy is dominated by non-farm industries such as manufacturing, retail trade, and health care. These sectors provide about 43 percent of jobs in Niagara County (Stats Indiana, 2006a). In recent years, the region has moved away from an industrial past and is pursuing a more sustainable tourism-based economy. In 2001, the State of New York started the USA Niagara Development Corporation to focus the redevelopment and revitalization of downtown Niagara Falls. Today, the tourism industry also plays a major role in Niagara County as Niagara Falls is a big draw to the area for up to 10 million US and international tourists per year. Niagara Falls also generates hydroelectric power- this was largely responsible for the region's rapid industrial development leading up to the 20<sup>th</sup> century. In addition, farming makes up a small portion of the ROI's economy, with fertile

flatlands at the Lake Ontario Plains where grapes, apples, peaches, and other fruits and vegetables are grown. A wine industry has also been in development and offers further tourism opportunities. At an average of 5.6 percent in 2005, the unemployment rate for the ROI is slightly above that of the national unemployment rate of 5.1 percent. It is also slightly above New York's unemployment rate of 5.0 percent.

#### **4.10.1.2 Demographics**

The most recent U.S. Census Bureau estimates (2000) projected the ROI to have 217,008 inhabitants in 2005. Niagara County is the 17<sup>th</sup> most populous county in New York State (Stats Indiana, 2006b), and has been steadily decreasing in population since 1970. Population data for the ROI, New York, and the United States are provided in Table 4-6 for comparison purposes.

**Table 4-6. ROI Population Growth 1980 -2006**

<b>Location</b>	<b>1980</b>	<b>1990</b>	<b>2000</b>	<b>2006</b>
Niagara County	227,354	220,756	219,846	216,130
New York	17,558,165	17,990,778	18,976,457	19,306,183
United States	226,542,250	248,790,925	281,421,906	299,398,484

Source: Stats Indiana, 2006b

#### **4.10.1.3 Environmental Justice**

On February 11, 1994, President Clinton issued EO 12898, *Federal Actions to Address Environmental Justice in Minority and Low-Income Populations*. The EO is designed to focus the attention of federal agencies on the human health and environmental conditions in minority communities and low-income communities. Environmental justice analyses are performed to identify potential disproportionately high and adverse impacts from proposed actions and to identify alternatives that might mitigate these impacts. Data from the U.S. Department of Commerce 2000 Census of Population and Housing (U.S. Census, 2000) were used for this environmental justice analysis. Minority populations included in the census are identified as Black or African American, American Indian and Alaska Native, Asian, Native Hawaiian and other Pacific Islander, Hispanic, of two or more races, and other. Poverty status, used in this EA to define low-income status, is reported as the number of persons with income below poverty level. The 2000 Census defines the poverty level as \$8,794 of annual income, or less, for an individual, and \$17,603 of annual income, or less, for a family of four.

In 2004, the median household income was \$40,118 for Niagara County residents. The poverty rate for the ROI in 2004 was 11.7 percent- slightly less than the national poverty rate of 12.5 percent, and less than New York State's poverty rate of 14.5 percent. In 2005, the ROI's population was comprised of the following ethnic groups: 90.6 percent white, 6.5 percent black, and 1.4 percent Hispanic (Stats Indiana, 2006b).

#### **4.10.1.4 Protection of Children**

On April 21, 1997, President Clinton issued EO 13045, *Protection of Children from Environmental Health Risks and Safety Risks*. The EO directs that Federal agencies “(a) shall make it a high priority to identify and assess environmental health risks and safety risks that may disproportionately affect children; and (b) shall ensure that its policies, programs, activities, and standards address disproportionate risks to children that result from environmental health risks or safety risks.” The EO recognizes children as a potentially vulnerable population, due to smaller size and weight, different behaviors, and the inability to protect themselves in all situations. These factors may make children at greater risk of adverse effects due to Federal agency actions. The EO is designed to ensure that applicable Federal actions do not disproportionately affect children.

#### **4.10.2 Environmental Consequences**

The economic effects of implementing the Proposed Action are estimated using the EIFS model, a computer-based economic tool that calculates multipliers to estimate the direct and indirect effects resulting from a given action. Changes in spending and employment associated with the renovation of housing represent the direct effects of the action. Based on the input data and calculated multipliers, the model estimates changes in sales volume, income, employment, and population in the ROI, accounting for the direct and indirect effects of the action.

For purposes of this analysis, a change is considered significant if it falls outside the historical range of ROI economic variation. To determine the historical range of economic variation, the EIFS model calculates a rational threshold value (RTV) profile for the ROI. This analytical process uses historical data for the ROI and calculates fluctuations in sales volume, income, employment, and population patterns. The historical extremes for the ROI become the thresholds of significance (i.e., the RTVs) for social and economic change. If the estimated effect of an action falls above the positive RTV or below the negative RTV, the effect is considered to be significant. Appendix B discusses this methodology in more detail.

##### **4.10.2.1 No Action Alternative**

No direct or indirect effects would be expected. Under the No Action Alternative, the installation working population and installation expenditures would remain unchanged from baseline levels and no new construction would take place. Therefore, economic activity levels and ROI population growth would be the same as under the baseline conditions. In addition, there would be no disproportionately high and adverse impacts to minority or low income populations. Hence, the No Action Alternative would not result in any environmental justice impacts.

##### **4.10.2.2 Preferred Alternative**

###### **4.10.2.2.1 Economic Development**

Minor direct and indirect beneficial effects would be expected. The incoming personnel under the Proposed Action would be coming from areas within the ROI; therefore, the construction of the new facilities on the



installation will be the sole contributor to short-term increased economic activity due to the associated increase in expenditures on labor and materials during the building period. Described below are the effects that such construction would generate.

The Proposed Action would generate 66 direct and 114 induced jobs for a total of 180 jobs in the economic ROI during the construction phase. This increase in employment would represent a 0.19 percent increase in the region's employment levels and would fall far short of the positive RTV Value of 4.06 percent to make any significant positive difference. It should be noted that the increased employment and any other economic benefits associated with construction would only be short-term and would be spread out over the lifespan of the project construction. The Proposed Action would also generate positive changes in the other economic indicators estimated by the EIFS model, including a 0.65 percent increase in sales volume, and a 0.13 percent increase in regional personal income. However, these increases are very minor, and do not exceed the positive RTV values for their respective categories. Tables 4-7, 4-8, and 4-9 provide summaries of the EIFS model inputs, outputs and RTV values respectively.

**Table 4-7. EIFS Report for Niagara Falls AFRC – Forecast Input**

Forecast Input	
Change In Local Expenditures	\$17,228,370 <sup>12</sup>
Change In Civilian Employment	0
Average Income of Affected Civilian	\$0
Percent Expected to Relocate	0
Change In Military Employment	0
Average Income of Affected Military	\$0
Percent of Military Living On-post	0

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<sup>12</sup> Change in local expenditures refers to construction spending for the AFRC and associated facilities proposed at Niagara Falls ARS. An estimate of construction spending for the project was determined by multiplying the most recent square footage and square yardage requirements for the facilities (U.S. Army, 2007) with the estimated unit costs presented in the FY2007 Military Construction Project Data – DD1391 forms (U.S. Army, 2006b and 2006c).

**Table 4-8. EIFS Report for Niagara Falls AFRC – Forecast Output**

Forecast Output		
Employment Multiplier	2.73	
Income Multiplier	2.73	
Sales Volume – Direct	\$10,917,610	
Sales Volume – Induced	\$18,887,470	
Sales Volume – Total	\$29,805,080	0.65%
Income – Direct	\$2,253,054	
Income – Induced	\$3,897,783	
Income – Total (place of work)	\$6,150,837	0.13%
Employment – Direct	66	
Employment – Induced	114	
Employment – Total	180	0.19%
Local Population	0	
Local Off-base Population	0	0%

**Table 4-9. EIFS Report for Niagara Falls AFRC – RTV Summary**

RTV Summary				
	Sales Volume	Income	Employment	Population
<b>Positive RTV</b>	8.26 %	8.33 %	4.06 %	1.01 %
<b>Negative RTV</b>	-6.61 %	-4.9%	-4.68 %	-0.65 %

#### *4.10.2.2.2 Demographics*

No direct and indirect effects would be expected. Under the Proposed Action, there would be no incoming military or civilian personnel from outside the ROI; therefore there would be no changes in the population of the ROI.

#### *4.10.2.2.3 Environmental Justice*

No effects would be expected. The Proposed Action would not result in significant adverse impacts to any demographic group residing or working in the economic ROI. Therefore, there would be no disproportionately high and adverse impacts to minority or low income populations. Hence, the Proposed Action for would not result in any environmental justice impacts.

#### *4.10.2.2.4 Protection of Children*

EO 13045 requires that Federal agencies identify and assess environmental health and safety risks that might disproportionately affect children. The Proposed Action would not likely pose any adverse or disproportionate health or safety risks to children living in the vicinity of Niagara Falls ARS. Niagara Falls ARS does not provide

base housing for military dependent families, so the likelihood of the presence of children at the site where the Proposed Action would occur on the Installation under the preferred alternative is considered minimal. Therefore, no adverse impacts would be expected from the construction or operation of the AFRC and the associated facilities.

#### **4.11 TRANSPORTATION**

This section describes the general traffic conditions within the affected environment in terms of access and circulation, and assesses any impacts related to these issues. The ROI for the Proposed Action is defined as the Niagara Falls ARS and the immediate surrounding areas in the towns of Niagara and Wheatfield, MA. Figure 4-7 provides a general overview of the road network on Niagara Falls ARS and in the surrounding area.

##### **4.11.1 Affected Environment**

###### ***4.11.1.1 Roadways and Traffic***

The Niagara Falls ARS is located 6 miles east of downtown Niagara Falls, NY and 20 miles north of the city of Buffalo. Access to the Niagara Falls ARS is possible via Interstate 190 (located approximately three miles to the west) and Packard Road to Lockport Road. Packard Road is a two lane road with approximately 22,000 daily vehicles in 2004 close to I-190. I-190 is four lane limited access facility that in 2004 carried over 35,000 daily vehicles (NYSDOT, 2007).

Vehicular access to Niagara Falls ARS is provided at three points. The Main Gate, supporting the highest traffic volume, is off Lockport Road and is open 24 hours. Two alternate access points are provided at the eastern and western perimeters of the Installation. The western gate is off Tuscarora Road and provides direct access to the 107<sup>th</sup> Air Refueling Wing (ARW) side of the Installation. This gate is used only during National Guard Unit Training Assemblies. The eastern gate provides access from Walmore Road. This gate is used mainly for vehicles handling hazardous materials. This gate operates from 6:00 a.m. to 5:00 p.m.

Access to the Installation is provided by the arterial Lockport Road. The three collector roads, Tuscarora Road, Ent Avenue, and Walmore Road extend from Lockport Road. Ent Avenue is the main entrance to the Installation. Once inside the Installation, primary roads provide circulation. Overall, the Niagara Falls ARS road network is comprised of primary, secondary, and tertiary roads.



**Legend**

- Proposed Site Boundary
- Niagara Falls ARS

**Niagara Falls Air Reserve Station Transportation Map**

0 1,000 2,000 Feet

Sources: Niagara Falls ARS, ESRI Imagery from 2003

Coordinate System: NAD 1983, New York West State Plane, Feet

Prepared By: The Louis Berger Group

**MAP INDEX**

ON  
Niagara Falls ARS  
MI  
Toronto  
OH  
PA  
VT  
MA  
CT

#### ***4.11.1.2 Installation Transportation***

There is no internal shuttle service.

#### ***4.11.1.3 Public Transportation***

There is no direct transit service to the Niagara Falls ARS. Routes 51 and 54 of the Niagara Frontier Transportation Authority run on Military Road (close to the intersection of Packard Road and I-190) approximately three miles away from the Niagara Falls ARS. These two routes connect with other routes at the Niagara Falls International Airport and at downtown Niagara Falls.

### **4.11.2 Environmental Consequences**

#### ***4.11.2.1 No Action Alternative***

Under the No Action Alternative there would be no changes to the existing transportation infrastructure at the site or in surrounding areas. No effects would be expected.

#### ***4.11.2.2 Preferred Alternative***

**Roadways and Traffic** – Minor effects would be expected. There is one project identified as part of the BRAC mandated initiatives. The impact that this new project would have on the transportation infrastructure is given by the number of trips that they will generate in addition to the current volumes.

Based on the fact that there are no units relocating from outside the ROI and as a result no net increases in trips under the Proposed Action, it is expected that impacts would be minor. The Army Reserve units are moving from the existing USARC which is on the other side of the airport runway, and the NY Army National Guard is relocating from nearby, approximately 4 miles away.

Under the Proposed Action, there would be an estimated increase of 586 workforce personnel to the new AFRC, 541 of whom are reservists and 45 of whom are full-time personnel. Therefore, in order to estimate the impact of the new AFRC complex on the surrounding area, a total of 586 additional personnel are assumed in the calculations. Based on the mix of full-time personnel and part-time (weekend) reservists, this analysis relies on the following working assumptions:

- Assume that all the full time personnel (45) will be accessing the AFRC on weekdays and all the 541 reservists will access the AFRC on weekend days.
- Assume three drill weekends a month, which would result in an maximum of 240 reserve personnel accessing the site on the maximum drill weekend.
- Therefore, the assumptions model expected increases of 45 personnel on weekdays and 240 on the maximum drill weekend.

Estimates of the number of trips generated by the Proposed Action were prepared using the procedures established by the Institute of Transportation Engineers (ITE) in its Trip Generation Handbook (2<sup>nd</sup> Edition) and its associated Trip Generation rates (7<sup>th</sup> Edition). The trip generation rates model reflect civilian transportation patterns; however, there are similarities to military bases and are used at a number of military bases to assess transportation impacts of proposed projects. Based on a survey of developments with different designated land uses incorporated within the handbook, the trips generated for each land use type were associated with an independent variable (building function, building square footage, number of personnel) and time period of analysis (AM and PM peak on weekdays; peak hour on Saturday and Sunday) through a regression analysis. The trip rates used in this analysis reflect a higher concentration of trips in the AM and PM peak hours than in civilian transportation patterns and also reflect an assumption that 5% of the AFRC personnel carpool to work.

The AM peak hour volumes represent a notional single peak hour that could be, for example, between 7:00-8:00 AM or 7:30-8:30 AM and reflect the conditions at a peak hour in the morning. The PM peak hour volumes reflect a similar situation in the afternoon.

Using the trip generation procedure outlined by the ITE, the trips generated by the project were estimated for a typical weekday and a typical drill weekend day. The estimated number of additional trips associated with the Proposed Action is presented in Table 4-10. As the table shows, the establishment of the new AFRC would cause 32 additional incoming trips in the AM peak hour and generate 31 additional outgoing trips in the PM peak hour on a weekday. On a drill weekend day there would be an estimated 171 additional incoming trips and an estimated 163 additional trips generated in the AM peak hour and PM peak hour, respectively, as a result of the Proposed Action.

**Table 4-10. Trips generated by the new project, by peak hour.**

Project Description	AM Peak Hour			PM Peak Hour		
	In	Out	Total	In	Out	Total
<b>Weekday – Armed Forces Reserve Center</b>	32	4	36	5	31	36
<b>Weekend – Armed Forces Reserve Center</b>	171	21	192	29	163	192

Source: The Louis Berger Group, Inc.

The Main gate will be used during the week by full-time employees while the Tuscarora Gate (in close proximity to the proposed site for the AFRC along the western boundary of the installation) would be used during the drill weekends, and more than likely by the construction vehicles during the construction of the facilities.

The traffic increases are modest and are expected to cause minor delay increases at the gates.

**Installation Transportation and Public Transportation** – Negligible impacts would be expected, as the Preferred Alternative would direct traffic to an area of the Installation with a nearby gate, well-developed existing traffic infrastructure, and a well-organized system of base primary, secondary, and tertiary roads.



## **4.12 UTILITIES**

### **4.12.1 Affected Environment**

The ROI is defined as utility services at Niagara Falls ARS and any potential affects on public utility service providers in the area.

Local municipal and commercial utility entities provide all major utilities (water, sewer, natural gas, electricity) at Niagara Falls ARS. Unless otherwise noted, the baseline utilities information provided below was obtained from the Niagara Falls ARS General Plan (NFARS, 1998).

#### ***4.12.1.1 Potable Water Supply***

Niagara Falls ARS has no active potable water wells. The Installation's primary potable water is acquired from the City of Niagara Falls, with the Town of Wheatfield serving as a secondary source. Water from these sources comes from the Niagara River, is pre-treated prior to it reaching the Installation, and meets all U.S. EPA potable water standards. The potable water consumption at Niagara Falls ARS averages 1.72 million gallons per month. The Installation does not provide any additional treatment to the potable water supply prior to consumption.

The water acquired from the Niagara Falls system is metered and delivered to the base via one 10-inch main. This main supplies Niagara Falls ARS with water through Building 729. The water supply is then delivered into the on-base distribution system through 10- to 12-inch mains. The average water pressure supplied to the Installation is approximately 60 pounds per square inch (psi).

The on-base water distribution system consists of both water mains and service laterals ranging in both size and pipe material. Water main pipes range in size from 10 to 12 inches and are composed primarily of asbestos cement. Lateral lines range in size from 1.25 inches to 8 inches and consist of predominantly galvanized iron or copper pipe. The on-base water supply system was constructed approximately 50 years ago. Some valves have been replaced and service laterals range in age from 2 to 50 years old, generally reflecting the age of the facility to which the connect. Utility personnel cite the overall condition of the water supply system as fair.

The base's potable water system is also used for fire protection and suppression. Fire suppression capability is supplemented by a 150,000-gallon ground-level reservoir and three diesel pumps. This reservoir supports fire suppression for four aircraft maintenance hangars used by the 914th AW and the 107th ARW.

Bioenvironmental Engineering periodically conducts complete water sampling tests to ensure that high quality potable water is continuously supplied. Deficient water lines will be replaced as necessary, and system expansion will occur concurrent with new construction on base.

#### ***4.12.1.2 Sanitary Sewer Service***

Niagara Falls ARS currently operates under a wastewater permit from the Niagara County Sewer Authority. The wastewater generated by the Installation is disposed of through Niagara County Sewer District's No. 1 sanitary sewer lines and sewage treatment facility. Niagara Falls ARS's wastewater is carried off Installation via one 8-inch force main. Because the 914th AW and 107th ARW systems are tied together, all wastewater is delivered off Installation with this line. All wastewater is delivered to the District's wastewater treatment plant, where it is treated and discharged. Niagara Falls ARS does not use septic systems for the treatment and disposal of wastewater. Industrial wastes are treated through oil/water separators and grease traps which subsequently discharge directly to the sanitary sewer system for additional treatment.

The on-Installation collector system consists of gravity flow pipes and force mains of various construction materials, including vitrified clay, and polyvinyl chloride (PVC). The system was originally installed in the 1950s, and the age of lines varies with the area of the Installation. The system consists predominately of gravity flow mains, and the Installation terrain and slopes provide for adequate flow. There are two lift stations within the Installation boundaries, which host one force main each; all other lines are gravity flow.

Improvements have been made to the sanitary sewer system in recent years. These improvements involved the resealing of system joints and the building of a new lift station and force main. After the aforementioned projects, infiltration was greatly reduced and the integrity of the system was enhanced.

The Niagara Falls Sewer District's sanitary sewer collection system and sewage treatment plant are adequate to meet the wastewater treatment requirements of Niagara Falls ARS and all components of the system are presently adequate to meet daily and future requirements.

#### ***4.12.1.3 Electrical Service and Distribution***

The Niagara Mohawk Power Corporation (Niagara Mohawk) is the purveyor of electricity for Niagara Falls ARS. Niagara Mohawk owns and maintains all off-Installation equipment. Niagara Falls ARS owns and maintains the system once it crosses into the Installation boundary. The station upgraded the electrical system in 1997. This upgrade was a two-year project, which involved upgrading from 4.8 kilovolts (kV) to 13.2 kV, and complete replacement and demolition of the old overhead system.

Niagara Mohawk supplies electrical power to Niagara Falls ARS through two incoming electrical supply lines. The 13.2 kV supply lines travel into the 107<sup>th</sup> ARW (western side of the Installation) from Tuscarora Road and the 914 AW side (main part of the Installation) through the Main Gate. The primary electrical lines come into Building 891 for metering while two circuits in the building route power to the Installation. The looped system consists of aboveground mounted power lines and copper laterals. The 107th ARW and the 914th AW electrical distribution systems are separated by a switch that is maintained by Niagara Mohawk for the safety of those off-base on the same circuit.

All power on the Installation flows at 13.2 kV, except for the Tactical Air Navigation circuit that flows at 4.8 kV. Individual transformers or shard transformer banks are used to decrease power to usable voltages. The new system was designed with multiple feeders with switching options for interconnections. Existing loads were balanced among feeders and between phases. Mission critical facilities are equipped with emergency generators in the event of unplanned commercial power outages.

#### **4.12.1.4 Storm Water System**

Storm water on Niagara Falls ARS is collected from impervious surfaces such as roads, airfield pavement, and buildings and conveyed to one of six storm water outfalls along Cayuga Creek or its tributaries. The storm water system consists of catch basins curb inlets, and culverts which guide the storm water through a combination of underground storm mains, man-made tiled ditches, swales and natural drainage ways. Table 4-11 provides information on the location of the storm water outfalls including their location, total drainage area, and the amount of impervious area and percentage associated with each outfall.

**Table 4-11. Storm Water Outfall Characteristics at Niagara Falls ARS**

<b>Outfall</b>	<b>Location on Installation</b>	<b>Total Drainage Area (acres)</b>	<b>Impervious Area (acres)</b>	<b>Percent Impervious (%)</b>
001	Northwest corner, drains Fire fighting Training Area	4.1	0.9	22
002	Eastern side, includes runoff from the Petroleum, Oil, and Lubricant (POL) Complex	9.2	3.7	40
003	Eastern side, includes runoff from the Petroleum, Oil, and Lubricant (POL) Complex	4.8	2.4	50
004	Southeast corner, drains Base Supply, Vehicle Fuel Station, and vehicle maintenance activities	62.9	18.4	63
005	Southern boundary near confluence of Cayuga Creek and tributary, drains large portion of Installation	572.4	78.8	14
006	Southern boundary just west of 005, drains most of 107 Air Refueling Wing facilities	53.4	24.5	46

Source: NFARS, 1998

Niagara Falls ARS voluntarily conducts storm water monitoring at three outfalls (outfalls 004, 005, and 006) that discharge to Cayuga Creek that leads off base and at three locations where storm water enters the base (AFRC, 2006). This voluntary sampling is performed during wet weather and provides information about the quality of the storm water that is generated and discharged from operations on the Installation. The NYSDEC issued a baseline General State Pollutant Discharge Elimination System (SPDES) Permit for Storm Water Discharges Associated with Industrial Activity in June 1993. Niagara Falls ARS was accepted for coverage under this

General Permit (SPDES Permit No. NYR00B522) on November, 30 1994. The SPDES general permit (GP-93-05) expired on August 1, 1998, and was extended by NYSDEC as GP-98-03 until October 31, 1998. The permit has been reissued as GP-98-03 for a five-year period effective November 1, 1998, and is substantially the same as the previous permit. SPDES General Permit Number GP-93-03 states "this permit expires on August 1, 2003. However, an expired general permit continues in force and effect until a new general permit issued." (AFRC, 2006). The NYSDEC has tentatively determined to renew and modify the existing SPDES General Permit (AFRC, 2006); however, at this time, a new permit has not been issued and GP-93-03 remains in force. An active SWPPP (AFRC, 2006) is currently in place to minimize the effects of storm water discharge into surface waters.

#### ***4.12.1.5 Natural Gas***

National Fuel Gas Company is the natural gas provider for Niagara Falls ARS. National Fuel Gas Company purveys natural gas to the 914th AW via one six-inch PVC plastic line. To meet the 914th AW needs, the pressure of the gas is reduced to five pounds per square inch. This pressure reduction is accomplished near the Main Gate at a metering/reducing station. Distribution main lines in the system vary between steel and PVC composition, although PVC is the primary construction material. Gas lines vary in size up to eight inches. The natural gas distribution system is looped on the 914th AW side. The valves have service valves, which make the looped system less effective.

Niagara Falls ARS has another point of entry for natural gas on the west side of the Installation with supplies 107<sup>th</sup> ARW facilities. The 107th ARW system is not looped and is a separate system.

The USAF owns and maintains all gas lines on the Installation from the points of entry on Lockport Road for the 914th AW and Tuscarora Road for the 107th ARW. Niagara Falls ARS assumes maintenance responsibility for any line that is two inches or less or is within five feet of a building on the Installation. There is no storage facility for natural gas on the Installation.

Natural gas is the primary heating source for Installation facilities. Natural gas supplies both Installation heating plants in addition to fueling natural gas-fired furnaces for steam boilers and radiant heat systems located within individual facilities. Natural gas consumption for the Installation averaged 80,000 cubic feet a month in fiscal year 1994. The highest consumption rates are recorded during the winter months.

National Fuel Gas provides uninterrupted service to the Installation, and utility personnel indicate that historically there have been no capacity or supply hindrances. The gas supply system is sufficient for current needs and requirements.

#### ***4.12.1.6 Communications***

The communications system consists of fiber optic cable between buildings and twisted pair copper cable for in-building connectivity. Intra-Installation and inter-Installation communication infrastructure exists above and

below ground. This infrastructure includes fiber optic local area network, NYANG closed circuit television, fire closed circuit television, police closed circuit television, telephone, and cable television.

#### **4.12.2 Environmental Consequences**

##### **4.12.2.1 No Action Alternative**

Under the No Action Alternative, no changes would occur at the Preferred Alternative site and current conditions would prevail without change. No effects on utilities would occur.

##### **4.12.2.2 Preferred Alternative**

Overall effects on utilities as a result of implementation of the Preferred Alternative would be negligible, since existing utility services are expected to be adequate for current and future usage demands and storm water would be retained on site through the construction of bio-retention areas. Some highly localized, temporary disruptions would be expected as utility lines and linkages are adjusted or extended as necessary to suit the specifics of the proposed AFRC complex building footprints and anticipated peak utility demands.

**Potable Water Supply** - There are existing potable water supply lines nearby that can provide potable water to the proposed facilities. However, the tie in would consist of a closed loop system versus a spur, in order to prevent potential pressure and quality problems. Pressure in the vicinity of the proposed site is estimated to be approximately 45 to 50 psi (U.S. Army, 2007). No significant adverse impacts to water supply systems would result from the Proposed Action under the preferred alternative.

**Sanitary Sewer System** – No significant adverse impacts would result. There is an 8-inch sanitary sewer line just south of the proposed site. However, prior to connecting to this line, a capacity analysis would need to be conducted to determine if the existing sewer line can accept the discharge from the proposed facilities. If this line can not accommodate the increased capacity, then the Town of Niagara has a sanitary sewer manhole at the intersection of Lockport and Tuscarora Roads (north of the proposed site) where the project could tie into. This would require more trenching than tying into the adjacent sewer line; however, adherence to an applicable construction NPDES permit would protect the surrounding areas from potential increases in erosion and sedimentation due to storm water run-off during construction.

**Electric Distribution System** – Overhead electrical lines exist along Tuscarora Road so no new transmission supply lines would be necessary. Electrical power from these lines would be extended underground to support the new AFRC facilities and it is expected that the Niagara Mohawk electrical power system would be able to accommodate the new demand. No significant adverse impacts to electrical power systems would result from the Proposed Action under the preferred alternative.

An emergency generator would be necessary under the preferred alternative to ensure that operations are not disrupted during outages or emergencies. The emergency generator would likely require an above ground storage

tank (AST) or underground storage tank (UST) that could require a new Spill Prevention Control and Countermeasures (SPCC) plan. Detailed specifications on the emergency generator, including capacity, fuel type(s), estimated annual usage, and AST/UST requirements, have not been finalized.

**Storm Water System** – No significant adverse impacts would result from the implementation of the Proposed Action under the preferred alternative. The proposed site and the surrounding areas are not currently served by storm sewers (U.S. Army, 2007). Therefore, to accommodate the increase in surface runoff from the newly constructed impervious surfaces (e.g. paved parking areas and building rooftops) and meet discharge requirements under the Installation's New York SPDES General Permit for Storm Water Discharges Associated with Industrial Activity, several bio-retention areas will be constructed on the proposed site. The bio-retention areas will be landscaped, infiltration areas which would provide both water quality and quantity control, thus preventing direct discharge of runoff into area surface waters or the adjacent wetland. In addition, any storm water subsequently discharged from the bio-retention areas will be directed into existing storm water drainage channels and not the wetland. The number, size, and placement of the bio-retention areas will be finalized during the final engineering, design, and construction planning for the AFRC complex to ensure that they can adequately accommodate any increase in surface runoff from the site.

Construction SPDES permit(s) and associated SWPPP(s) would be necessary, and it is anticipated that the Installation's SPDES General Permit for Storm Water Discharges Associated with Industrial Activity would also be required to be revised and/or updated to accommodate the new facilities. Through the adherence to provisions specified in an appropriate Construction SPDES permit and site specific SWPPP, as well as compliance with the Installation's SPDES General Permit for Storm Water Discharges Associated with Industrial Activity and BMPs it is expected that there would only be negligible impacts on the storm water system as a result of implementing the Proposed Action under the Preferred Alternative.

**Natural Gas** - There is an existing 6-inch natural gas line that enters the Installation along Tuscarora Road. The proposed facilities would tie into this line along the western boundary of the proposed site, so no new major supply lines would be necessary. No adverse impacts to natural gas systems would result from the Proposed Action under the preferred alternative.

**Communications** – Operation of the AFRC and associated facilities would not result in a change to the Installations communication system. No adverse impact to communication systems would result from the Proposed Action under the preferred alternative.

#### **4.13 HAZARDOUS AND TOXIC SUBSTANCES**

Hazardous materials are substances that, because of their quantity, concentration, or physical, chemical, or infectious characteristics, may present a substantial danger to public health or the environment if released. These typically include reactive materials such as explosives, ignitables, toxics (such as pesticides), and corrosives (such



as battery acid). When improperly stored, transported, or otherwise managed, hazardous materials can significantly affect human health and safety and the environment.

#### **4.13.1 Affected Environment**

Hazardous materials waste at Niagara Falls ARS are managed in accordance with the DoD Directive 4210.15 (*Hazardous Materials Pollution Prevention*), Air Force Instruction (AFI) 32-7086 (*Hazardous Materials Management*), AFI 32-7042 (*Solid and Hazardous Waste Compliance*), and AFI 32-7080 (*Pollution Prevention Program*), which incorporate all requirements of federal regulations, DoD Directives, and AFIs for the reduction of hazardous material uses and purchases. Niagara Falls ARS has a comprehensive *Hazardous Material Emergency Planning and Response (HAZMAT) Plan, SPCC Plan, and USAF HAZMAT Plan for Niagara Falls Air Reserve Station* which was updated in May, 2002 (NFARS, 2002a). The Plan includes details on base safety planning, personnel training, and detailed emergency response procedures. The Niagara Falls ARS *Hazardous Waste Management Plan* (NFARS, 2002b) describes base-wide hazardous waste policies and procedures, training, emergency response, reporting requirements, and waste stream analyses.

##### **4.13.1.1 Uses of Hazardous Materials**

Niagara Falls ARS is a large quantity generator (LQG), which is defined by RCRA as a generator who generates greater than 1,000 kilograms per month of hazardous waste. The U.S. EPA Generator Identification Number for Niagara Falls ARS (914th AW) is NY0570024273 (NFARS, 2002b). In addition, the 107th ARW of the NYANG (a major tenant organization on Niagara Falls ARS) has their own U.S. EPA Identification Number (NYR000087882). Processes generating hazardous wastes on Niagara Falls ARS include aircraft and vehicle maintenance, parts cleaning, support equipment maintenance, general facility maintenance, painting, nondestructive inspection, weapons training and cleaning, and expired shelf-life chemicals.

The current USARC (Niagara Falls AFRC/AMSA-76(G)) generates small amounts of hazardous waste and is a conditionally exempt small quantity generator (CESQG), with U.S. EPA Identification Number NY8210424273. The majority of the USARC's hazardous waste is generated by vehicle maintenance activities. The USARC generates approximately 150-200 gallons of used motor oil per year, 10 gallons of used hydraulic oil per year, 40 gallons of used transmission fluid per year, 20 gallons of waste brake fluid per year, 55 gallons of contaminated diesel fuel per year, and 20 gallons of used antifreeze per year (U.S. Army, 2001).

The NYARNG unit that is a part of this Proposed Action does not perform their own vehicle maintenance. They send their vehicles to other facilities to perform the maintenance.

##### **4.13.1.2 Storage and Handling Areas**

Hazardous wastes are generated at Niagara Falls ARS during routine operations and maintenance activities. As a LQG permitted facility, Niagara Falls ARS has a Central Storage Area (CSA) and satellite collection sites, but cannot store hazardous waste for more than 90 days. Niagara Falls ARS is not permitted as a Transportation,

Storage, or Disposal (TSD) facility or for on-site hazardous waste disposal. Hazardous wastes are transported off-site by approved carriers through the Defense Reuse and Marketing Office (DRMO) in Portsmouth, NH to licensed treatment or disposal facilities in accordance with regulatory requirements (NFARS, 2002b).

#### **4.13.1.3 Site Contamination Cleanup**

Niagara Falls ARS has 14 Installation Restoration Program (IRP) sites identified through a rigorous process of site evaluation (see Table 4-12). Some of these 14 sites encompass areas of potential soils and ground water contamination stemming from past waste management practices or accidental releases (NFARS, 1998). Of the 14 sites, No Further Response Action Planned decision documents have been completed and approved for four sites: 6, 11, 12, and 13. Of the remaining sites, long-term groundwater monitoring is underway at sites 1, 2, 4, 5, 7, 8, and 9. Remedial designs involving groundwater extraction and discharge have been developed for sites 3, 10 and 13. Any proposed alteration on an area designated as an IRP site needs a waiver from Headquarters, Air Force Reserve Command.

**Table 4-12. Summary of IRP Sites at Niagara Falls ARS**

IRP Site	Name	Contaminant	Status
1	Building 600 JP-4 Pipeline Leak	JP-4	Long-term monitoring (LTM) of groundwater (GW)
2	POL Bulk JP-4 Tank C Leak	JP-4	LTM of GW
3	Landfill	Construction rubble, coal ash, waste oil, shop wastes, batteries, electrical and car parts, and drums	Corrective Measures (CM) being implemented
4	Base Exchange Gas Station Motor Gasoline Tank Leak	Gasoline	LTM of GW
5	NYANG Hazardous Waste Drum Storage Yard	Drummed hazardous waste including solvents, paints, and oils	LTM of GW
6	POL Bulk JP-4 Tank A Leak	JP-4	No Further Action (NFA)
7	JP-4 Tank Truck Spill	JP-4	LTM of GW
8	Building 202 Drum Storage Yard	Drummed hazardous waste including solvents, paints, and oils	LTM of GW
9	Fire Training Area No. 3	Waste fuels, oils, solvents, and hydraulic fluid	LTM of GW
10	Fire Training Area No. 1	Waste fuels, oils, solvents, and hydraulic fluid	CM being implemented
11	Fire Training Area No. 2	Waste JP-4	NFA
12	Building 850 Drum Storage Yard	Drummed hazardous waste including solvents, paints, and battery acid oils	NFA
13	Underground Tank Pit	General ship waste including waste	CM being implemented

IRP Site	Name	Contaminant	Status
		oils, solvents, and automotive fluids	
14	AFRC Hazardous waste Drum Storage Yard	Drummed hazardous waste including solvents, paints, and battery acid oils	NFA - Site Closed

Source: AFRC, 1998

CM – corrective measures

GW – groundwater

LTM – long-term monitoring

NFA – no further action

#### 4.13.2 Environmental Consequences

##### 4.13.2.1 No Action Alternative

No effects would be expected for under the No Action Alternative, for the proposed new facilities would not be constructed.

##### 4.13.2.2 Preferred Alternative

**AFRC Building** – The proposed AFRC would consist primarily of office space and administrative service areas. There would be minimal use of hazardous materials, such as janitorial products and printing supplies. Any hazardous materials will be handled and stored in accordance with applicable regulations and label precautions and will not have any significant adverse impacts, though some negligible long-term adverse effects would be expected from the very minimal use of hazardous materials and waste generation in this proposed facility.

The AFRC would include an emergency generator and associated AST tank or UST that would likely contain adequate amounts of diesel fuel to ensure that the AFRC could continue to function while running the emergency generator. An updated or new SPCC plan would be necessary to address any new fuel storage tanks.

**OMS/AMSA and MEP Area** – No significant adverse impacts would result from the Proposed Action under the preferred alternative, though some negligible to minor adverse effects would be expected. This proposed facility would include a vehicle maintenance shop, with service bays and a controlled waste storage area. Maintenance activities require the use of several types of hazardous materials. Typical products used would include antifreeze, various POLs, brake fluid, hydraulic fluid, cleaners, degreasers, solvents, paints, fuels (gasoline and diesel), and batteries. All hazardous materials would be handled and stored in appropriate hazardous materials cabinets or containers in accordance with applicable regulations and label precautions. While facility design plans have not been finalized yet, floor drains that convey flow through oil-water separators will be included. Plans also include two vehicle wash racks, one inside and one outside, and discharge flow from these facilities will also be conveyed through oil/water separators (U.S. Army, 2007). The facility will also require a new RCRA Hazardous Waste Generator identification number from the U.S. EPA.

The generation of hazardous waste at this new facility would likely result in negligible short- and long-term adverse impacts, based on the potential for small spills and the overall use of hazardous materials and disposal of hazardous waste from Niagara Falls ARS. The activities at the proposed OMS/AMSA are similar to activities currently ongoing at Niagara Falls ARS. Long-term impacts are expected to be negligible, and limited to very small quantities of vehicle fluids. The possibility for even these very small amounts of materials to migrate off-site or impact area natural resources would be reduced to virtually none by the use of drip trays, mats, regular removal of fluids during longer vehicle storage periods, and the application of standard BMPs.

Negligible to minor long-term adverse effects would be expected in storing and handling of hazardous waste. It is expected that used oil would be stored in an approved tank that includes secondary containment. Other hazardous wastes would be stored in a satellite accumulation area in containers and with labels as required by applicable regulations, and taken to the permitted hazardous waste storage facility within the allotted time frame for disposal or recycling. Any spills or releases of hazardous wastes would be handled according to the Niagara Falls ARS safety regulations and plans.

Historical documents indicate the previous existence of structures on both sides of Rubin Way. It is not known whether the foundations for these structures were completely removed or not when they were demolished (U.S. Army, 2007). If found, such materials would be removed, handled, transported and disposed of according to applicable state, local, and Federal regulations. The area east of Rubin Way has a history as construction debris and spoils dumping area for prior Installation construction projects. Additionally, there may be foundations from old structures and abandoned utility lines. According to the Base Civil Engineer, no hazardous materials were ever dumped on the site, and although some of it has subsequently been removed, significant amounts still remain (U.S. Army, 2007). It is likely that the material cannot be used as structural fill, so the current plan would use as much of this material as possible in landscaping berms on the new site in order to avoid costly hauling and disposal fees (U.S. Army, 2007). However, all materials excavated would be handled and/or disposed of in accordance with any applicable environmental and safety regulations.

The demolition of Building 960 on the proposed site of the OMS/AMSA west of Rubin Way can be expected to require some abatement and possible removal of asbestos-containing materials, and lead-based paint which are typically found in pre-1978 structures (Building 960 was built in 1965). Such materials would be removed and disposed of in accordance with applicable environmental and safety regulations. If any other hazardous materials are found during demolition, such materials would be removed from the site and disposed of in accordance with applicable environmental and safety regulations.

There are no IRP sites located where the proposed AFRC and associate facilities would be constructed under the preferred alternative. Therefore there would be no impact to any IRP sites as a result of the construction of the proposed facilities.

#### 4.14 CUMULATIVE EFFECTS SUMMARY

A cumulative impact is defined as “the impacts on the environment that result from the incremental impact of the action when added to other past, present, or reasonably foreseeable future actions regardless of what agency (federal or non-federal) or person undertake such other actions” (40 CFR 1508.7). The section goes on to note: “such impacts can result from individually minor but collectively significant actions taking place over a period of time.” Cumulative impacts associated with implementation of the Preferred Alternative would include any impacts from other on-going actions that would be incremental to the impacts of constructing the proposed AFRC complex and realigning units to Niagara Falls ARS.

As a result of the BRAC Commission’s recommendations for the Niagara Falls USARC, the existing USARC will be closed, disposed, and reused or redeveloped by a third party. However, currently there is no transferee identified or a reuse plan for the property/facilities.

In 2004 Niagara Falls ARS identified 12 future capital improvement projects on the installation to replace inadequate existing facilities or construct new facilities to perform activities necessary to meet USAF mission, emergency response, and force protection concerns at the Installation. These projects are (1) Construct Base Civil Engineer Administrative Facility/Demolish Building 403, (2) addition to Base Medical Training Facility/Clinic (Building 802), (3) Install force protection measures at Main Gate, (4) Demolish and Construct Visiting Quarters Facility (Phases I and II), (5) Construct Fire/Crash Rescue Facility, (6) Demolish and Construct Dining Facility, (7) Construct Recycling/Centralized Waste Center, (8) Construct Flightline Access Road, (9) Demolish and Construct Lift Station, (10) Addition and alteration to Security Police Facility (Building 310), (11) Construct AFRC Recruitment Billboard, and (12) Construct Vehicle Wash Facility. These projects are under consideration and their implementation would be subject to availability of funding, scheduling, and other factors. However, two of these projects, Construct Fire/Crash Rescue Facility and construct Visiting Quarters Facility (Phase II) are either currently occurring or will occur in the near future.

Niagara Frontier Transportation Authority (NFTA) has plans for several small facility upgrades at the Niagara Falls IAP. The East Apron Expansion Project will be undertaken to meet new Federal Aviation Administration requirements (NFARS, 2006). The NFTA is also proposing to construct a new 65,000 square-foot terminal at the Niagara Falls IAP; however, the NFTA Board of Commissioners is still pursuing funding for the project (NFTA, 2007).

##### 4.14.1 No Action Alternative

Implementation of the No Action Alternative would avoid new impacts that could interact with the impacts of other past, present, or reasonably foreseeable actions. Therefore, there would be no cumulative impacts associated with the No Action Alternative.

#### **4.14.2 Preferred Alternative**

Because there is no identified transferee and no reuse plan for the existing USARC, at this time there is insufficient information to properly evaluate the reuse or redevelopment of the existing USARC. The appropriate NEPA analysis and documentation considering the cumulative impacts of all connected actions will be completed prior to disposal.

Neither the construction of the Fire/Crash Rescue Station nor the construction of the Visiting Quarters Facilities on the Installation or the small facility upgrades at the Niagara Falls ARS would likely cause any cumulative effects of note. Under the Preferred Alternative there would be a cumulative loss of vegetation and open space habitat, however, these effects would not be significant as all of the projects would occur on previously disturbed land and the locations where they are occurring contains little wildlife habitat value. A cumulative increase in the amount of impervious surfaces within the Installation and airport area as a whole would be expected. An increase in impervious surfaces can cause increased storm water flows and erosion. However, these impacts would likely be reduced by the construction of landscaped bio-retention areas at the proposed AFRC site and through the use of BMPs, such as revised storm water management plans and erosion and sediment control plans. Cumulative economic benefits can be expected in terms of minor short-term increases in area jobs and indirect economic expenditures during the construction phases of the projects.

Overall the cumulative effects of the Proposed Action with other projects would not result in any significant adverse impacts to area resources.

#### **4.15 IRREVERSIBLE AND IRRETRIEVALBE COMMITMENT OF RESOURCES**

An irreversible/irretrievable commitment of resources results from a decision to use or modify resources when they are renewable only over a long period of time, such as soil productivity, or when they are nonrenewable resources, such as cultural resources.

##### **4.15.1 No Action Alternative**

Implementation of the No Action Alternative would not result in the irreversible or irretrievable commitment of resources.

##### **4.15.2 Preferred Alternative**

The Proposed Action would result in minimal loss of vegetation and wildlife habitat on the proposed construction site. The location of the proposed AFRC and OMS/AMSA/MEP area has been previously disturbed. Furthermore, the Proposed Action would remove open space or undeveloped land, but only land that provides marginal biological habitat.

The materials and energy required for the construction, operation, and maintenance of the proposed facilities also represent irretrievable commitments of resources. The total amount of construction materials required for the



Proposed Action is relatively insignificant when compared to the resources available in the region. The energy required for construction consists of the fuels necessary to operate heavy construction equipment and trucks. Although energy conservation is a vital and critical issue, the energy resource commitment to the Proposed Action is not anticipated to be excessive in terms of region-wide usage. Materials and energy are not in short supply and their use would not have an adverse effect upon continued availability of these resources. Construction, operation, and maintenance would also require a substantial expenditure of Federal funds that would not be directly retrievable.

#### **4.16 MITIGATION SUMMARY**

None of the predicted effects of the Proposed Action would result in significant impacts; therefore, mitigation is not needed. However, the U.S. Army may consider the use of BMPs in the construction and operation of the AFRC and associated facilities in addition to those required by law, regulation, or U.S. Army/U.S. Air Force policy. Additional BMPs may include specific measures to reduce potential erosion, storm water runoff, and sediment transport during site preparation and construction activities.

## 5.0 FINDING AND CONCLUSIONS

### 5.1 FINDINGS

#### 5.1.1 Consequences of the No Action Alternative

Under the No Action Alternative, the proposed new AFRC complex would not be constructed, and no environmental impacts would occur.

#### 5.1.2 Consequences of the Preferred Alternative

The Proposed Action would not have any significant adverse effects on any of the environmental or related resource areas at Niagara Falls ARS or to areas surrounding the Installation. For all resource areas, effects are evaluated to be at the None, Negligible, or Minor levels, all of which equate to less than significant adverse impacts.

A summary of impacts by resource area for the No Action and Preferred Alternatives is provided in Table 5-1.

### 5.2 CONCLUSIONS

None of the predicted effects of the Proposed Action would result in significant impacts. Moreover, mitigation would not be necessary to offset impacts. Therefore, the results of the analyses warrant issuance of a FONSI.

**Table 5-1. Summary of the Impacts of the Proposed Action Alternatives**

Resource	No Action Alternative	Preferred Alternative
<b>Land Use</b>		
<i>Regional Geographic Setting and Location</i>	None. No Significant Impact	None. No Significant Impact.
<i>Installation Land</i>	None. No Significant Impact.	Negligible to minor. No Significant Impact.
<i>Surrounding Land</i>	None. No Significant Impact.	None. No Significant Impact.
<i>State Coastal Management Program</i>	None. No Significant Impact.	None. No Significant Impact.
<i>Current and Future Development in the Region of Influence</i>	None. No Significant Impact.	None. No Significant Impact.
<b>Aesthetic and Visual Resources</b>	None. No Significant Impact.	Negligible Adverse. No Significant Impact.
<b>Air Quality</b>		
<i>Ambient Air Quality Conditions</i>	None. No Significant Impact.	Negligible Adverse. No Significant Impact.
<i>Air Pollutant Emissions at Installation</i>	None. No Significant Impact.	Negligible Adverse. No Significant Impact.
<i>Regional Air Pollutant Emissions Summary</i>	None. No Significant Impact.	Negligible Adverse. No Significant Impact.

<b>Resource</b>	<b>No Action Alternative</b>	<b>Preferred Alternative</b>
<b>Noise</b>	None. No Significant Impact.	Minor Adverse short-term impacts due to construction activities. No Significant Impact.
<b>Geology and Soils</b>		
<i>Geologic and Topographic Conditions</i>	None. No Significant Impact.	None. No Significant Impact.
<i>Soils</i>	None. No Significant Impact.	Minor Adverse. No Significant Impact.
<i>Prime Farmland</i>	None. No Significant Impact.	None. No Significant Impact.
<b>Water Resources</b>		
<i>Surface Water</i>	None. No Significant Impact.	Minor Adverse. No Significant Impact.
<i>Hydrogeology/Groundwater</i>	None. No Significant Impact.	Negligible Adverse. No Significant Impact.
<i>Floodplains</i>	None. No Significant Impact.	None. No Significant Impact.
<b>Biological Resources</b>		
<i>Vegetation</i>	None. No Significant Impact.	Negligible Adverse. No Significant Impact.
<i>Wildlife</i>	None. No Significant Impact.	Negligible Adverse. No Significant Impact.
<i>Sensitive Species</i>	None. No Significant Impact.	None. No Significant Impact.
<i>Wetlands</i>	None. No Significant Impact.	None. No Significant Impact.
<b>Cultural Resources</b>		
<i>Archaeological</i>	None. No Significant Impact.	None. No Significant Impact.
<i>Historical Architecture</i>	None. No Significant Impact.	None. No Significant Impact.
<i>Native American Resources</i>	None. No Significant Impact.	None. No Significant Impact.
<b>Socioeconomics</b>		
<i>Economic Development</i>	None. No Significant Impact.	Minor beneficial. No Significant Impact.
<i>Demographics</i>	None. No Significant Impact.	None. No Significant Impact.
<i>Environmental Justice</i>	None. No Significant Impact.	None. No Significant Impact.
<i>Protection of Children</i>	None. No Significant Impact.	None. No Significant Impact.
<b>Transportation</b>		
<i>Roadways and Traffic</i>	None. No Significant Impact.	Minor Adverse. No Significant Impact.
<i>Installation Transportation</i>	None. No Significant Impact.	Negligible Adverse. No Significant Impact.
<i>Public Transportation</i>	None. No Significant Impact.	Negligible Adverse. No Significant Impact.
<b>Utilities</b>		
<i>Potable Water Supply</i>	None. No Significant Impact.	None Adverse. No Significant Impact.

<b>Resource</b>	<b>No Action Alternative</b>	<b>Preferred Alternative</b>
<i>Wastewater System</i>	None. No Significant Impact.	None. No Significant Impact.
<i>Storm water System</i>	None. No Significant Impact.	Negligible Adverse. No Significant Impact.
<i>Energy Sources</i>	None. No Significant Impact.	None. No Significant Impact.
<b>Hazardous and Toxic Substances</b>		
<i>Uses of Hazardous Materials</i>	None. No Significant Impact.	Negligible Adverse. No Significant Impact.
<i>Storage and Handling Areas</i>	None. No Significant Impact.	Negligible to Minor Adverse. No Significant Impact.
<i>Site Contamination and Cleanup</i>	None. No Significant Impact.	None. No Significant Impact.
<b>Cumulative Effects</b>	None. No Significant Impact.	Negligible – mostly likely beneficial. No Significant Impact.
<b>Irreversible &amp; Irretrievable Commitment of Resources</b>	None. No Significant Impact.	Negligible. No Significant Impact.

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## 6.0 LIST OF PREPARERS

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Name	Title	Education/Responsibility	Experience
Cynthia Savoy	BRAC Project Manager	B.S. Chemical Engineering. Responsible for the overall management of the BRAC NEPA document preparation.	23 years

### Niagara Falls Air Reserve Station

Name	Title	Education/Responsibility	Experience
James Mathews	Physical Scientist	M.S. Forestry BS Forestry Responsible for data studies and document review	14

### The Louis Berger Group, Inc.

Name	Title	Education/Responsibility	Experience
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Najja Bracey	Economist	M.A. International Relations and Economics. Responsible for Socioeconomic sections/EIFS modeling	4 years
Rebecca Byron	Environmental Scientist	B.S. Environmental Science and Policy. Responsible for Air Quality.	2 years
Timothy Canan, AICP	Program Manager and Senior Planner	M.U.R.P. Urban and Regional Planning. Responsible for program management and all sections prepared by Louis Berger staff.	17 years
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## **7.0 AGENCIES CONTACTED**

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U.S. Fish and Wildlife Service

### **State Officials and Agencies**

New York Office of Parks, Recreation and Historic Preservation

New York Department of Environmental Conservation

### **Libraries**

Niagara Falls Public Library

### **Media**

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## 9.0 ACRONYMS

°	Degrees
%	Percent
AADT	Annual Average Daily Traffic
ABS	Air Base Squadron
ADG	Air Defense Group
AEPI	U.S. Army Environmental Policy Institute
AIRFA	American Indian Religious Freedom Act
AFRC	Armed Forces Reserve Center
AFRC	Air Force Reserve Command
AMSA	Area Maintenance Support Activity
AOC	Area of Contamination
AQI	Air Quality Index
ARPA	Archaeological Resources Protection Act
ARS	Air Reserve Station
AFRES	Air Force Reserve
ARW	Air Refueling Wing
AST	Aboveground Storage Tank
AT/FP	Anti-Terrorism/Force Protection
AW	Airlift Wing
BMP	Best Management Practice(s)
BRAC	Base Realignment and Closure
CAA	Clean Air Act
CAAA	Clean Air Act Amendments
CEQ	Council on Environmental Quality

CERCLA	Comprehensive Environmental Response, Compensation, and Liability Act (also known as SuperFund)
CERL	U.S. Army Construction Engineering Research Laboratory
CESQG	Conditionally Exempt Small Quantity Generator
CFR	Code of Federal Regulations
CO	carbon monoxide
COBRA	Cost of Base Realignment Actions
CRMP	Cultural Resources Management Plan
CSA	Central Storage Area
CWA	Clean Water Act
dB	Decibels
dBA	A-weighted Decibels
DD	Defense Department
DEPMEDS	Deployable Medical System
DNL	Day-night Average Sound Level
DoD	Department of Defense
DRMO	Defense Reuse and Marketing Organization
EA	Environmental Assessment
EIFS	Economic Impact Forecast System
EIS	Environmental Impact Statement
EO	Executive Order
ESA	Endangered Species Act
F	Fahrenheit
FEMA	Federal Emergency Management Administration
FIS	Fighter Interceptor Squadron
FNSI	Finding of No Significant Impact
FONSI	Finding of No Significant Impact

FPPA	Farmland Protection Policy Act
ft <sup>2</sup>	Square Feet
FWPCA	Federal Water Pollution Control Act
gpm	Gallons Per Minute
HVAC	Heating, Ventilation, and Air Conditioning
IAP	International Airport
kg	kilogram
km	kilometer
kV	kilovolts
lbs	pounds
LQG	Large Quantity Generator
MEP	Military Equipment Parking
NAAQS	National Ambient Air Quality Standards
NAGPRA	Native American Graves Protection and Repatriation Act
NEPA	National Environmental Policy Act
NHESP	Natural Heritage and Endangered Species Program
NHPA	National Historic Preservation Act
NOI	Notice of Intent
NO <sub>2</sub>	nitrogen dioxide
NO <sub>x</sub>	Nitrogen oxides
NORAD	North American Defense
NPDES	National Pollutant Discharge Elimination System
NPV	Net Present Value



NRCS	Natural Resource Conservation Service
NRHP	National Register of Historic Places
NYANG	New York Air National Guard
NYARNG	New York Army National Guard
NYSDEC	New York State Department of Environmental Conservation
NYSHRP	New York State Office of Parks, Recreation and Historic Preservation
O <sub>3</sub>	Ozone
OMS	Organizational Maintenance Shop
Pb	Lead
PCB	polychlorinated biphenyls
PM <sub>10</sub>	particles with a diameter less than or equal to a nominal 10 micrometers
PM <sub>2.5</sub>	particles with a diameter less than or equal to a nominal 2.5 micrometers
POL	petroleum, oils, and lubricants
POV	Privately-Owned Vehicle
ppm	parts per million
psi	pounds per square inch
PVC	Polyvinyl Chloride
RCRA	Resource Conservation and Recovery Act
ROI	Region of Influence
RTV	Rational Threshold Value
SCF	Standard Cubic Feet
SDWA	Safe Drinking Water Act
Sec.	Section
SIP	State Implementation Plan
SO <sub>2</sub>	sulfur dioxide

SPCC	Spill Prevention Control and Countermeasures
SPDES	State Pollution Discharge Elimination System
sy	square yard(s)
SWPPP	Storm Water Pollution Prevention Plan
TO&E	Table Organization and Equipment
TPY	tons per year
TSCA	Toxic Substance Control Act
TSD	Transportation, Storage, or Disposal
USACE	U.S. Army Corps of Engineers
USARC	U.S. Army Reserve Center
USC	United States Code
USDA	U.S. Department of Agriculture
U.S. EPA	U.S. Environmental Protection Agency
USFWS	U.S. Fish and Wildlife Service
USGS	U.S. Geological Survey
UST	Underground Storage Tank
VOC	Volatile Organic Compounds

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## **APPENDIX A— FEDERAL AND STATE COORDINATION LETTERS**

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## DEPARTMENT OF THE AIR FORCE

AIR FORCE RESERVE COMMAND

April 30, 2007

Dermott F. Smyth  
914 MSG/CE  
2405 Franklin Drive  
Niagara Falls ARS NY 14304-5063

David A. Stilwell, Field Supervisor  
U.S. Fish and Wildlife Service  
New York Field Office  
3817 Luker Road  
Cortland, NY 13045-9349

Dear Mr. Stilwell,

The Department of the Army (the Army) is preparing an Environmental Assessment (EA) for the proposed construction of an Armed Forces Reserve Center (AFRC) complex to be located at the Niagara Falls Air Reserve Station (NFARS), New York. On September 8, 2005, the Defense Base Realignment and Closure Commission ("BRAC Commission") recommended that the U.S. Army close the Niagara Falls U.S. Army Reserve Center (USARC) and construct a new AFRC that could also accommodate New York Army National Guard (NYARNG) units from the Readiness Center in Niagara Falls, NY. These recommendations were approved by the President on September 23, 2005, and forwarded to Congress. The Congress did not alter any of the BRAC Commission's recommendations, and on November 9, 2005, the recommendations became law. To implement these recommendations, the U.S. Army proposes to construct the necessary facilities to support the changes in force structure at NFARS.

The EA will analyze and document the potential environmental effects associated with the U.S. Army's proposed realignment actions in Niagara Falls. The EA is being prepared in strict accordance with the National Environmental Policy Act (NEPA) of 1969, as amended (42 USC 4321 et seq.); the Council on Environmental Quality (CEQ) Regulations (40 CFR 1500-1508); and Environmental Analysis of Army Actions (32 CFR Part 651).

The AFRC would be the primary facility for twelve U.S. Army Reserve units and one NYARNG unit that would relocate from nearby facilities not currently located at NFARS. Along with the unit personnel, associated vehicles, equipment, and materials would also be relocated to the new AFRC.

The proposed AFRC complex would include an approximately 71,720 square feet (ft<sup>2</sup>) two-story training building located on existing federal property at NFARS. That building would provide adequate space for training, classrooms, offices, administrative and other support spaces for approximately 600 people. The AFRC site would also include an approximately 17,476 ft<sup>2</sup> Operational Maintenance Shop (OMS)/Area Maintenance Support Activity (AMSA), an approximately 4,886 ft<sup>2</sup> unheated storage building, and an approximately 1-acre Deployable Medical System (DEPMEDS) area consisting of a gravel surface. Approximately 22,167 square



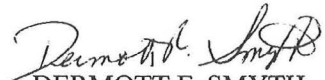
yards (sy) of paving will be required for privately-owned parking areas, military equipment parking (MEP) areas, and access road modifications.

The Army also proposes improvements to support the AFRC and associated facilities. These include clearing land, paving, fencing, generally improving the site, and extending existing utilities to serve the project. Disabled persons will be able to access the buildings. The Army will include Anti-Terrorism/Force Protection (AT/FP) safety and security measures in the facility design and site plan. These include minimum stand-off distance from roads, parking areas and vehicle unloading areas.

We are initiating this consultation in accordance with NEPA to evaluate the potential effects associated with implementing the proposed action. The affected areas where the construction of the AFRC and its associated facilities would occur are shown in Enclosures 1 and 2. The site and surrounding area are not serviced by storm sewers so surface runoff will be directed to bioretention areas and other stormwater best management practices in order to provide both water quality and quantity control. Stormwater will be discharged from the bioretention areas into existing drainage channels. A State Pollutant Discharge Elimination System (SDPES) Stormwater Permit for construction activity would apply for this proposed action. Based upon the information available we do not anticipate that the project would impact any federally listed species, migratory birds or wetlands. There is a small (0.33 acre) federal jurisdictional wetland to the north of the proposed site; however, the project and stormwater measures would be sited so as not to disturb this wetland. Please confirm that no federally endangered, threatened or candidate species occur in the project area and that consultation under Section 7 of the Endangered Species Act is not necessary.

Thank you in advance for your cooperation in this matter. Please provide any comments to me at the address listed above or fax your response to my attention at (716) 236-2598. If you have any questions or need additional information, please contact Mr. James Mathews of the 914 MSG/CEV at (716) 236-3122.

Sincerely

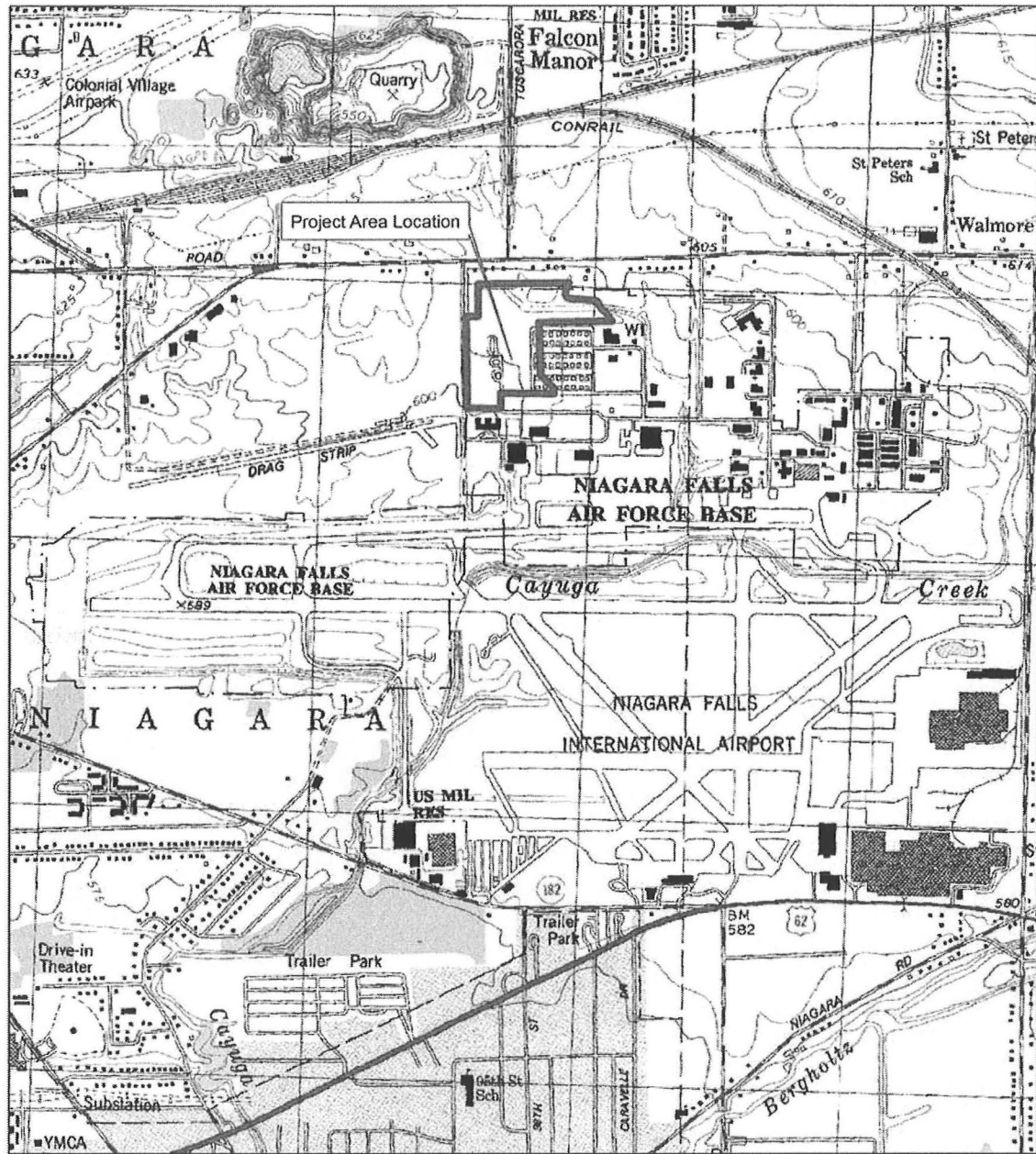
  
DERMOTT F. SMYTH  
Base Civil Engineer

Enclosures:

1. Project Location
2. Site Layout

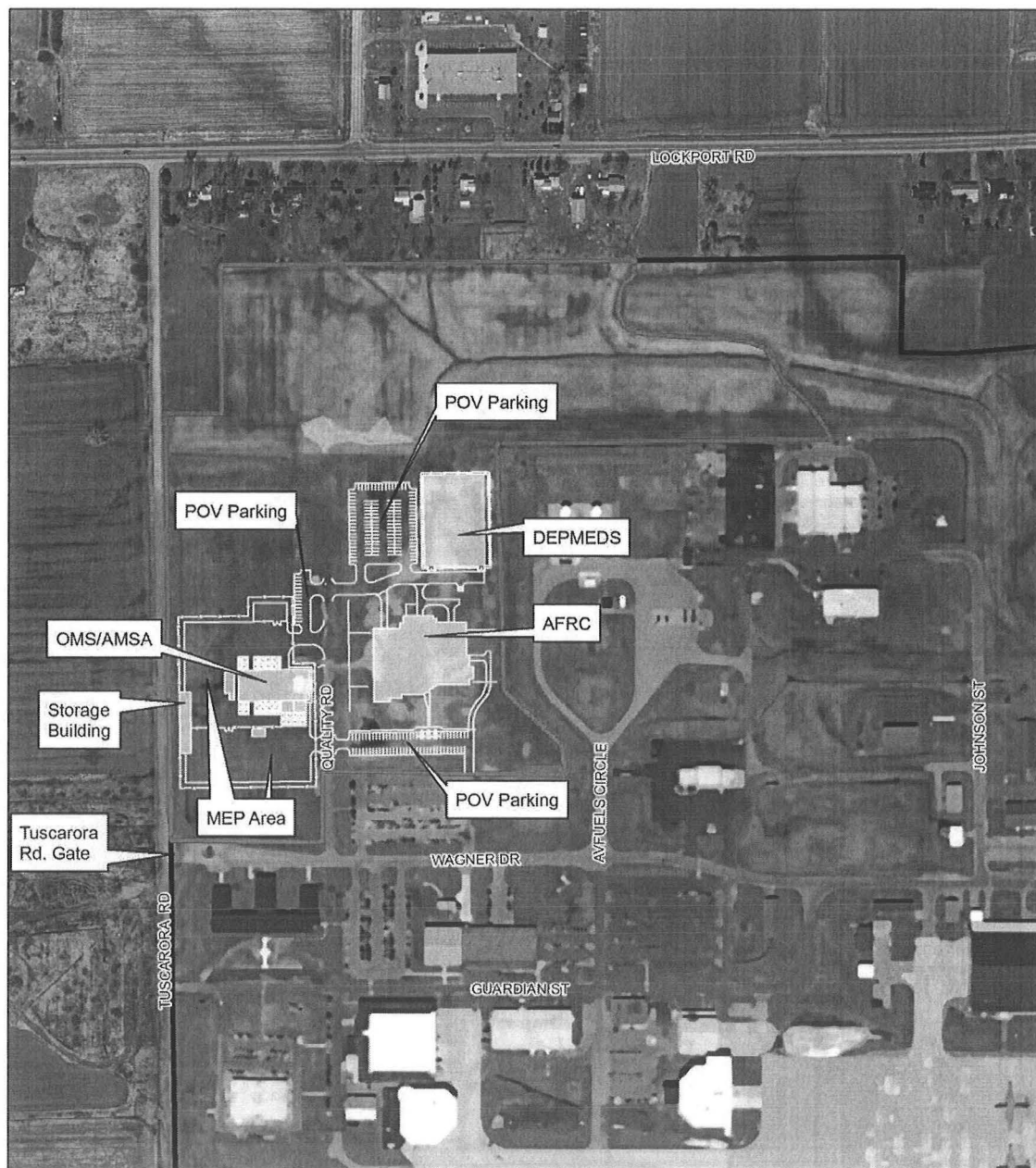
# Enclosure 1

## Project Location for BRAC Proposed Action Alternative— USGS 1:24,000 Scale Topographic Quadrangle



## Enclosure 2

### Proposed AFRC Site Layout – Niagara Falls ARS



#### Legend

- Proposed Construction
- Niagara Falls ARS
- Proposed Site Boundary
- Proposed Building
- Wetlands

Niagara Falls ARS  
AFRC Complex  
Proposed Site



0 180 360 540 Feet

Sources: Niagara Falls ARS, NYSGIS, ESRI  
Imagery from 2005.

Coordinate System: NAD 1983, New York West  
State Plane, Feet  
Prepared By: The Louis Berger Group

#### MAP INDEX



**United States Department of the Interior****FISH AND WILDLIFE SERVICE**

New York Field Office

3817 Luker Road

Cortland, NY 13045

Phone: (607) 753-9334 Fax: (607) 753-9699

<http://www.fws.gov/northeast/nyfo>Project Number: 70685To: Dermott Smyth Date: 6-5-07Regarding: Armed Forces Reserve Center complexTown/County: Niagara Falls / Niagara

We have received your request for information regarding occurrences of Federally-listed threatened and endangered species within the vicinity of the above-referenced project/property. Due to increasing workload and reduction of staff, we are no longer able to reply to endangered species list requests in a timely manner. In an effort to streamline project reviews, we are shifting the majority of species list requests to our website at <http://www.fws.gov/northeast/nyfo/es/section7.htm>. Please go to our website and print the appropriate portions of our county list of endangered, threatened, proposed, and candidate species, and the official list request response. Step-by-step instructions are found on our website.

As a reminder, Section 9 of the Endangered Species Act (ESA) (87 Stat. 884, as amended; 16 U.S.C. 1531 *et seq.*) prohibits unauthorized taking\* of listed species and applies to Federal and non-Federal activities. Additionally, endangered species and their habitats are protected by Section 7(a)(2) of the ESA, which requires Federal agencies, in consultation with the U.S. Fish and Wildlife Service (Service), to ensure that any action it authorizes, funds, or carries out is not likely to jeopardize the continued existence of listed species or result in the destruction or adverse modification of critical habitat. An assessment of the potential direct, indirect, and cumulative impacts is required for all Federal actions that may affect listed species. For projects not authorized, funded, or carried out by a Federal agency, consultation with the Service pursuant to Section 7(a)(2) of the ESA is not required. However, no person is authorized to "take"\* any listed species without appropriate authorizations from the Service. Therefore, we provide technical assistance to individuals and agencies to assist with project planning to avoid the potential for "take," or when appropriate, to provide assistance with their application for an incidental take permit pursuant to Section 10(a)(1)(B) of the ESA.

Project construction or implementation should not commence until all requirements of the ESA have been fulfilled. If you have any questions or require further assistance regarding threatened or endangered species, please contact the Endangered Species Program at (607) 753-9334. Please refer to the above document control number in any future correspondence.

Endangered Species Biologist: Sandra Doran

\*Under the Act and regulations, it is illegal for any person subject to the jurisdiction of the United States to *take* (includes harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect; or to attempt any of these), import or export, ship in interstate or foreign commerce in the course of commercial activity, or sell or offer for sale in interstate or foreign commerce any endangered fish or wildlife species and most threatened fish and wildlife species. It is also illegal to possess, sell, deliver, carry, transport, or ship any such wildlife that has been taken illegally. "Harm" includes any act which actually kills or injures fish or wildlife, and case law has clarified that such acts may include significant habitat modification or degradation that significantly impairs essential behavioral patterns of fish or wildlife.



## United States Department of the Interior

### FISH AND WILDLIFE SERVICE



New York Field Office  
3817 Luker Road, Cortland, NY 13045  
Phone: (607) 753-9334  
Fax: (607) 753-9699

Long Island Field Office  
3 Old Barto Rd., Brookhaven, NY 11719  
Phone: (631) 776-1401  
Fax: (631) 776-1405

### Endangered Species Act List Request Response Cover Sheet

This cover sheet is provided in response to a search of our website\* for information regarding the potential presence of species under jurisdiction of the U.S. Fish and Wildlife Service (Service) within a proposed project area.

Attached is a copy of the New York State County List of Threatened, Endangered, and Candidate Species for the appropriate county(ies). The database that we use to respond to list requests was developed primarily to assist Federal agencies that are consulting with us under Section 7(a)(2) of the Endangered Species Act (ESA) (87 Stat. 884, as amended; 16 U.S.C. 1531 *et seq.*). Our lists include all Federally-listed, proposed, and candidate species known to occur, as well as those likely to occur, in specific counties.

The attached information is designed to assist project sponsors or applicants through the process of determining whether a Federally-listed, proposed, or candidate species and/or "critical habitat" may occur within their proposed project area and when it is appropriate to contact our offices for additional coordination or consultation. You may be aware that our offices have provided much of this information in the past in project-specific letters. However, due to increasing project review workloads and decreasing staff, we are now providing as much information as possible through our website. We encourage anyone requesting species list information to print out all materials used in any analyses of effects on listed, proposed, or candidate species.

The Service routinely updates this database as species are proposed, listed, and delisted, or as we obtain new biological information or specific presence/absence information for listed species. If project proponents coordinate with the Service to address proposed and candidate species in early stages of planning, this should not be a problem if these species are eventually listed. However, we recommend that both project proponents and reviewing agencies retrieve from our online database an *updated* list every 90 days to append to this document to ensure that listed species presence/absence information for the proposed project is *current*.

**Reminder:** Section 9 of the ESA prohibits unauthorized taking\*\* of listed species and applies to Federal and non-Federal activities. For projects not authorized, funded, or carried out by a Federal agency, consultation with the Service pursuant to Section 7(a)(2) of the ESA is not required. However, no person is authorized to "take\*\*" any listed species without appropriate authorizations from the Service. Therefore, we provide technical assistance to individuals and agencies to assist with project planning to avoid the potential for "take\*\*," or when appropriate, to provide assistance with their application for an incidental take permit pursuant to Section 10(a)(1)(B) of the ESA.



Additionally, endangered species and their habitats are protected by Section 7(a)(2) of the ESA, which requires Federal agencies, in consultation with the Service, to ensure that any action it authorizes, funds, or carries out is not likely to jeopardize the continued existence of listed species or result in the destruction or adverse modification of critical habitat. An assessment of the potential direct, indirect, and cumulative impacts is required for all Federal actions that may affect listed species.

For instance, work in certain waters of the United States, including wetlands and streams, may require a permit from the U.S. Army Corps of Engineers (Corps). If a permit is required, in reviewing the application pursuant to the Fish and Wildlife Coordination Act (48 Stat. 401, as amended; 16 U.S.C. 661 *et seq.*), the Service may concur, with or without recommending additional permit conditions, or recommend denial of the permit depending upon potential adverse impacts on fish and wildlife resources associated with project construction or implementation. The need for a Corps permit may be determined by contacting the appropriate Corps office(s).\*

For additional information on fish and wildlife resources or State-listed species, we suggest contacting the appropriate New York State Department of Environmental Conservation regional office(s) and the New York Natural Heritage Program Information Services.\*

Since wetlands, ponds, streams, or open or sheltered coastal waters may be present in the project area, it may be helpful to utilize the National Wetlands Inventory (NWI) maps as an initial screening tool. However, they may or may not be available for the project area. Please note that while the NWI maps are reasonably accurate, they should not be used in lieu of field surveys for determining the presence of wetlands or delineating wetland boundaries for Federal regulatory purposes. Online information on the NWI program and digital data can be downloaded from Wetlands Mapper, [http://wetlands.fws.gov/mapper\\_tool.htm](http://wetlands.fws.gov/mapper_tool.htm).

Project construction or implementation should not commence until all requirements of the ESA have been fulfilled. After reviewing our website and following the steps outlined, we encourage both project proponents and reviewing agencies to contact our office to determine whether an accurate determination of species impacts has been made. If there are any questions about our county lists or agency or project proponent responsibilities under the ESA, please contact the New York or Long Island Field Office Endangered Species Program at the numbers listed above.

Attachment (county list of species)

\*Additional information referred to above may be found on our website at:  
<http://www.fws.gov/northeast/nyfo/es/section7.htm>

\* \* Under the Act and regulations, it is illegal for any person subject to the jurisdiction of the United States to *take* (includes harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect; or to attempt any of these), import or export, ship in interstate or foreign commerce in the course of commercial activity, or sell or offer for sale in interstate or foreign commerce any endangered fish or wildlife species and most threatened fish and wildlife species. It is also illegal to possess, sell, deliver, carry, transport, or ship any such wildlife that has been taken illegally. "Harm" includes any act which actually kills or injures fish or wildlife, and case law has clarified that such acts may include significant habitat modification or degradation that significantly impairs essential behavioral patterns of fish or wildlife.



## Niagara County

### Federally Listed Endangered and Threatened Species and Candidate Species

This list represents the best available information regarding known or likely County occurrences of Federally-listed and candidate species and is subject to change as new information becomes available.

<u>Common Name</u>	<u>Scientific Name</u>	<u>Status</u>
Bald eagle	<i>Haliaeetus leucocephalus</i>	T
Eastern prairie fringed orchid ( <i>Historic</i> )	<i>Platanthera leucophea</i>	T

E=Endangered T=Threatened P=Proposed C=Candidate

Information current as of: 6/7/2007



## DEPARTMENT OF THE AIR FORCE

AIR FORCE RESERVE COMMAND

April 30, 2007

Dermott F. Smyth  
914 MSG/CE  
2405 Franklin Drive  
Niagara Falls ARS NY 14304-5063

Abby M. Snyder, Regional Director  
New York State Department of Environmental Conservation  
Buffalo Regional Headquarters  
270 Michigan Avenue  
Buffalo, NY 14203-2999

Dear Ms. Snyder,

The Department of the Army (the Army) is preparing an Environmental Assessment (EA) for the proposed construction of an Armed Forces Reserve Center (AFRC) complex to be located at the Niagara Falls Air Reserve Station (NFARS), New York. On September 8, 2005, the Defense Base Realignment and Closure Commission ("BRAC Commission") recommended that the U.S. Army close the Niagara Falls U.S. Army Reserve Center (USARC) and construct a new AFRC that could also accommodate New York Army National Guard (NYARNG) units from the Readiness Center in Niagara Falls, NY. These recommendations were approved by the President on September 23, 2005, and forwarded to Congress. The Congress did not alter any of the BRAC Commission's recommendations, and on November 9, 2005, the recommendations became law. To implement these recommendations, the U.S. Army proposes to construct the necessary facilities to support the changes in force structure at NFARS.

The EA will analyze and document the potential environmental effects associated with the U.S. Army's proposed realignment actions in Niagara Falls. The EA is being prepared in strict accordance with the National Environmental Policy Act (NEPA) of 1969, as amended (42 USC 4321 et seq.); the Council on Environmental Quality (CEQ) Regulations (40 CFR 1500-1508); and Environmental Analysis of Army Actions (32 CFR Part 651).

The AFRC would be the primary facility for twelve U.S. Army Reserve units and one NYARNG unit that would relocate from nearby facilities not currently located at NFARS. Along with the unit personnel, associated vehicles, equipment, and materials would also be relocated to the new AFRC.

The proposed AFRC complex would include an approximately 71,720 square feet (ft<sup>2</sup>) two-story training building located on existing federal property at NFARS. That building would provide adequate space for training, classrooms, offices, administrative and other support spaces for approximately 600 people. The AFRC site would also include an approximately 17,476 ft<sup>2</sup> Operational Maintenance Shop (OMS)/Area Maintenance Support Activity (AMSA), an approximately 4,886 ft<sup>2</sup> unheated storage building, and an approximately 1-acre Deployable Medical System (DEPMEDS) area consisting of a gravel surface. Approximately 22,167 square

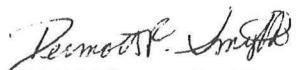
yards (sy) of paving will be required for privately-owned parking areas, military equipment parking (MEP) areas, and access road modifications.

The Army also proposes improvements to support the AFRC and associated facilities. These include clearing land, paving, fencing, generally improving the site, and extending existing utilities to serve the project. Disabled persons will be able to access the buildings. The Army will include Anti-Terrorism/Force Protection (AT/FP) safety and security measures in the facility design and site plan. These include minimum stand-off distance from roads, parking areas and vehicle unloading areas.

We are initiating this consultation in accordance with NEPA to evaluate the potential effects associated with implementing the proposed action. The affected areas where the construction of the AFRC and its associated facilities would occur are shown in Enclosures 1 and 2. The site and surrounding area are not serviced by storm sewers so surface runoff will be directed to bioretention areas and other stormwater best management practices in order to provide both water quality and quantity control. Stormwater will be discharged from the bioretention areas into existing drainage channels. A State Pollutant Discharge Elimination System (SDPES) Stormwater Permit for construction activity would apply for this proposed action. Based upon the information available we do not anticipate that the project would impact any state or federally listed species, migratory birds or wetlands. There are no New York State designated wetlands in proximity to the proposed site, and the project, as well as stormwater measures, would be sited so as not to disturb a small (0.33 acres) federal jurisdictional wetland to the north. We seek confirmation from the NYS DEC that this BRAC-related action at NFARS would not impact any of the trust resources of the State of New York.

Thank you in advance for your cooperation in this matter. Please provide any comments to me at the address listed above or fax your response to my attention at (716) 236-2598. If you have any questions or need additional information, please contact Mr. James Mathews of the 914 MSG/CEV at (716) 236-3122.

Sincerely

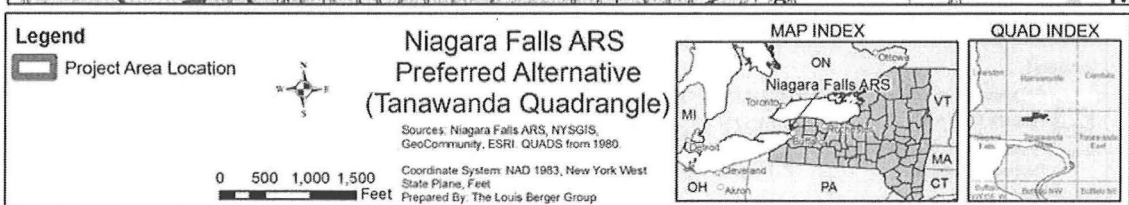
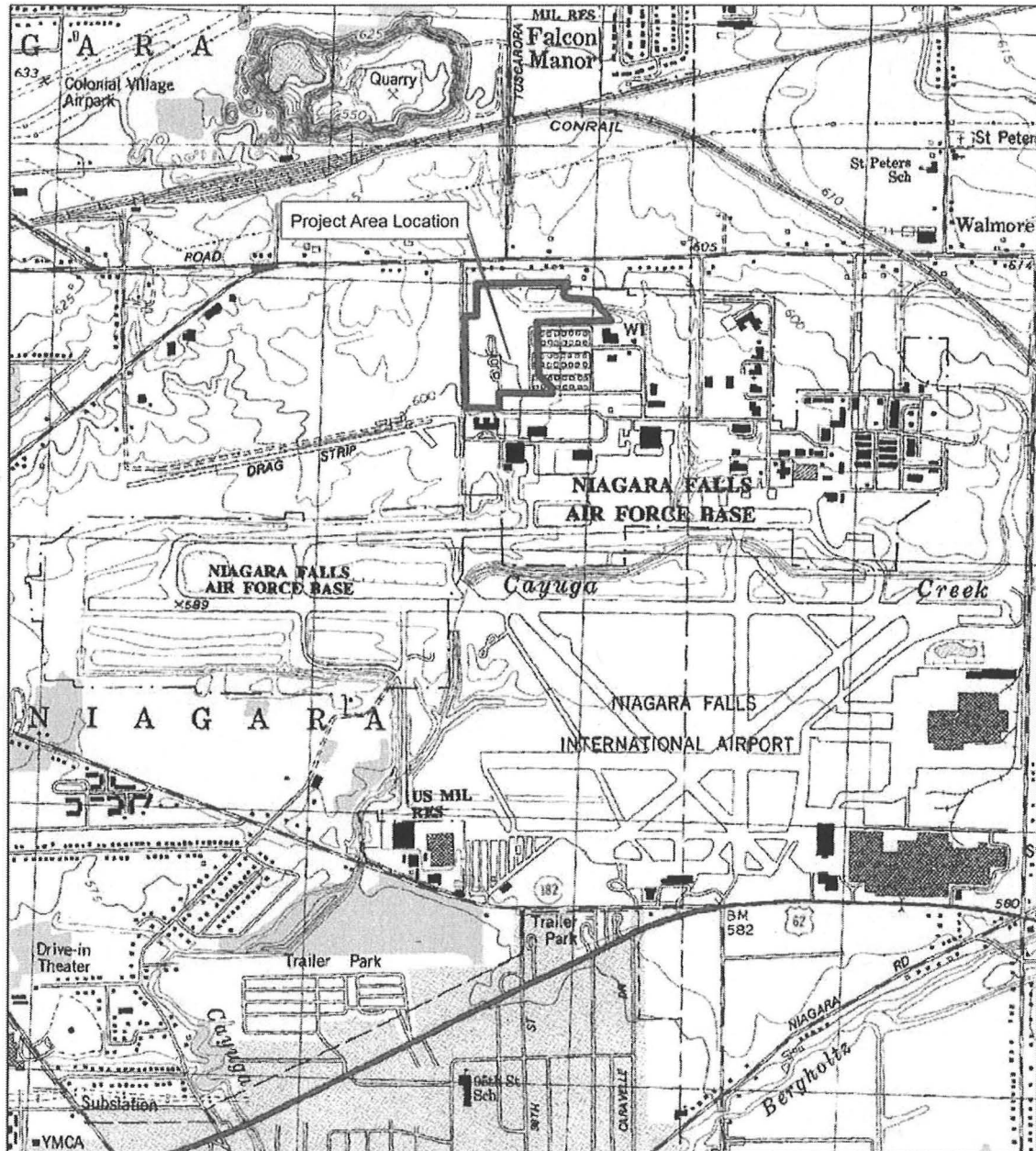
  
DERMOTT F. SMYTH  
Base Civil Engineer

Enclosures:

1. Project Location
2. Site Layout

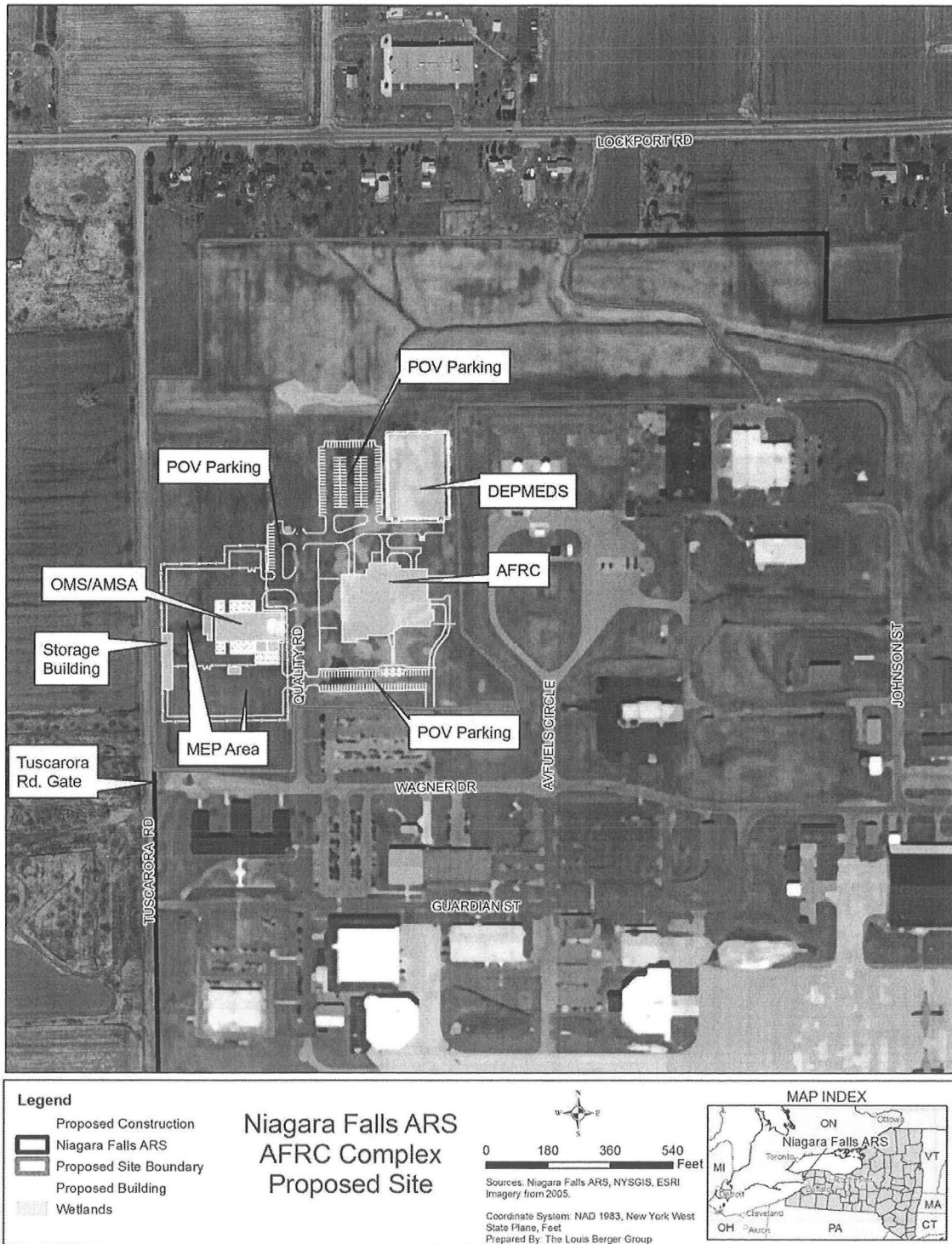
# Enclosure 1

## Project Location for BRAC Proposed Action Alternative— USGS 1:24,000 Scale Topographic Quadrangle



## Enclosure 2

### Proposed AFRC Site Layout – Niagara Falls ARS



# New York State Department of Environmental Conservation

## Division of Environmental Permits, Region 9

270 Michigan Avenue, Buffalo, New York, 14203-2999

Phone: (716) 851-7165 • FAX: (716) 851-7168

Website: [www.dec.state.ny.us](http://www.dec.state.ny.us)



Alexander B. Grannis  
Commissioner

May 25, 2007

Mr. Dermott F. Smyth  
Base Civil Engineer  
Department of the Air Force  
Air Force Reserve Command  
914 MSG/CE  
2405 Franklin Drive  
Niagara Falls Air Reserve Station, New York 14304-5063

Dear Mr. Smyth:

**PROPOSED ARMED FORCES RESERVE CENTER  
NIAGARA FALLS AIR RESERVE STATION  
TOWN OF NIAGARA - NIAGARA COUNTY**

This will acknowledge receipt of your April 30, 2007 letter to Regional Director, Ms. Abby Snyder. Your letter is correct in noting that a State Pollutant Discharge Elimination System (SPDES) General Permit (GP-02-01) for Stormwater Discharge from Construction Activities would be required for construction of the proposed Armed Forces Reserve Center (AFRC) complex. A Notice of Intent (NOI) is required to be sent to NYSDEC, Bureau of Water Permits, 625 Broadway, Albany, New York 12233-3505, telephone: 518/402-8111 and approved before construction commences. The General Permit GP-02-01 and NOI form are available on the Department's website at [www.dec.state.ny.us](http://www.dec.state.ny.us). The General Permit requires the project sponsor and all contractors and subcontractors to control stormwater runoff according to a Stormwater Pollution Prevention Plan (SWPPP). A copy of the NOI Form is enclosed with this letter.

Please recognize that Cayuga Creek and its tributaries within the Niagara Falls Air Reserve Station (ARS) are not regulated by virtue of their "C" water quality standards (6NYCRR 837.4 Item Nos. 15 and 17) nor are they navigable under State definition. Consequently, a Protection of Waters Permit pursuant to Article 15, Title 5 of the NYS Environmental Conservation Law (ECL) will not be required. However, it is noted that the Federal Emergency Management Agency has mapped an area of 100-year floodplain roughly 100 feet wide along the tributary of Cayuga Creek located in the northeast corner of the proposed AFRC site.

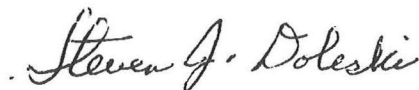


Mr. Dermott F. Smyth  
May 25, 2007  
Page 2

There are no wetlands regulated pursuant to Article 24 (Freshwater Wetlands) of the ECL with 100 feet of the proposed AFRC site. In addition, no endangered or threatened species, or sensitive habitats are known on the proposed AFRC site.

Please also recognize that the US Department of the Army, Corps of Engineers (US Army Engineer District, Buffalo, 1776 Niagara Street, Buffalo, New York 14207-3199, Attn: Regulatory Branch) may require that this Department issue Water Quality Certification pursuant to Section 401 of the Federal Water Pollution Control Act and 6NYCRR Section 608.9, if construction involves fill in any waters of the United States, including Federally regulated wetlands. However, the Water Quality Certification issued by Deputy Permit Administrator, Mr. John J. Ferguson, on May 11, 2007 for the existing Nationwide Permit Program may cover the proposed work.

Sincerely,

A handwritten signature in cursive script that reads "Steven J. Doleski".

Steven J. Doleski  
Regional Permit Administrator

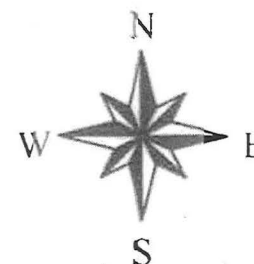
JED:vam

cc: Ms. Abby Snyder, Regional Director  
Mr. William Smythe, NYSDEC, Division of Water  
U.S. Department of the Army, Corps of Engineers, Buffalo District Office

# Proposed AFRC Site Layout - Niagara Falls ARS



- Archeological Sites
- Tax Parcel-Niagara
- Aquifers, Primary
- National Wetlands Inventory (polygon)
  - Estuarine
  - Lacustrine
  - Marine
  - Palustrine
  - Riverine
- Regulated Facilities
- NYS Regulatory Freshwater Wetland
  - Class 1
  - Class 2
  - Class 3
  - Class 4
  - Uncoded
- Filtered Natural Heritage ProgramEO Boundary
  - Extant
  - Failed to Find
  - Historical
  - Extirpated
  - In Process
- Oil and Gas Well Permit
  - Dry Hole
  - Gas Well
  - Gas Well Plugged
  - Other Well
  - Other Well Plugged
  - Oil Well
  - Oil Well Plugged
  - Gas Storage Well
  - Gas Storage Well Plugged
  - Solution Mining Well
  - Solution Mining Well Plugged
- National/State Register Site



0.2 0 0.2 0.4 Miles



**DEPARTMENT OF THE AIR FORCE**  
**AIR FORCE RESERVE COMMAND**

April 30, 2007

Dermott F. Smyth  
914 MSG/CE  
2405 Franklin Drive  
Niagara Falls ARS NY 14304-5063

Robert D. Kuhn, Ph.D  
New York State Office of Parks, Recreation,  
and Historic Preservation  
Historic Preservation Field Services Bureau  
Peebles Island, PO Box 189  
Waterford, NY 12188-0189

Dear Dr. Kuhn,

The Department of the Army (the Army) is preparing an Environmental Assessment (EA) for the proposed construction of an Armed Forces Reserve Center (AFRC) complex to be located at the Niagara Falls Air Reserve Station (NFARS), New York. On September 8, 2005, the Defense Base Realignment and Closure Commission ("BRAC Commission") recommended that the U.S. Army close the Niagara Falls U.S. Army Reserve Center (USARC) and construct a new AFRC that could also accommodate New York Army National Guard (NYARNG) units from the Readiness Center in Niagara Falls, NY. These recommendations were approved by the President on September 23, 2005, and forwarded to Congress. The Congress did not alter any of the BRAC Commission's recommendations, and on November 9, 2005, the recommendations became law. To implement these recommendations, the U.S. Army proposes to construct the necessary facilities to support the changes in force structure at NFARS.

The EA will analyze and document the potential environmental effects associated with the U.S. Army's proposed realignment actions in Niagara Falls. The EA is being prepared in strict accordance with the National Environmental Policy Act (NEPA) of 1969, as amended (42 USC 4321 et seq.); the Council on Environmental Quality (CEQ) Regulations (40 CFR 1500-1508); and Environmental Analysis of Army Actions (32 CFR Part 651).

The AFRC would be the primary facility for twelve U.S. Army Reserve units and one NYARNG unit that would relocate from nearby facilities not currently located at NFARS. Along with the unit personnel, associated vehicles, equipment, and materials would also be relocated to the new AFRC.

The proposed AFRC complex would include an approximately 71,720 square feet (ft<sup>2</sup>) two-story training building located on existing federal property at NFARS. That building would provide adequate space for training, classrooms, offices, administrative and other support spaces for approximately 600 people. The AFRC site would also include an approximately 17,476 ft<sup>2</sup> Operational Maintenance Shop (OMS)/Area Maintenance Support Activity (AMSA), an approximately 4,886 ft<sup>2</sup> unheated storage building, and an approximately 1-acre Deployable

Medical System (DEPMEDS) area consisting of a gravel surface. Approximately 22,167 square yards (sy) of paving will be required for privately-owned parking areas, military equipment parking (MEP) areas, and access road modifications.

The Army also proposes improvements to support the AFRC and associated facilities. These include clearing land, paving, fencing, generally improving the site, and extending existing utilities to serve the project. Disabled persons will be able to access the buildings. The Army will include Anti-Terrorism/Force Protection (AT/FP) safety and security measures in the facility design and site plan. These include minimum stand-off distance from roads, parking areas and vehicle unloading areas.

The affected areas where the construction of the AFRC and its associated facilities would occur are shown in Enclosures 1 and 2.


In accordance with NEPA and Section 106 of the National Historic Preservation Act (NHPA), an evaluation of the potential impacts associated with implementing this action is required. Building 960 is located on the project site and would need to be demolished under the proposed action. A recent Historic Resources Survey and Evaluation at Niagara Falls ARS by SAIC (draft completed January 2007) did not identify any buildings (including Building 960), structures, sites, or objects at Niagara Falls ARS that were considered eligible for listing in the National Register of Historic Places. Enclosure 3 is a copy of the draft Historic Property Survey Form completed for Building 960 during the survey and evaluation.

A Stage 1 Cultural Resource Investigation for Niagara Falls ARS conducted by Pratt and Huth Associates, LLP in 1998 revealed no significant archaeological or historic sites within the ARS. Evaluated under the project review number 95PR2445 and by letter dated May 12, 2000 (Enclosure 4), your office concurred with the conclusions of the February 7, 2000 Stage 1 Cultural Resource Investigation that there are no archaeological sites at Niagara Falls ARS and stated that "future projects at Niagara Falls ARS will not require any additional archeological investigations." We have also attached a copy of Figure 4-14 of the Stage 1 Investigation (Enclosure 5) that shows the study areas in relation to the proposed site for your reference. No testing was conducted in Area FF because of the high degree of subsurface utilities and other excavations according to the February 7, 2000 Cultural Resource Investigation. The Investigation also described that areas not tested as "too highly disturbed."

Based on the conclusions of these previous projects and the historically disturbed nature of the proposed site, it is believed that the proposed action will have no effect on cultural resources.

We welcome your input and request your confirmation of this determination. Thank you in advance for your cooperation in this matter. Please provide any comments to me at the address listed above or fax your response to my attention at (716) 236-2598. If you have any questions or need additional information, please contact Mr. James Mathews of the 914 MSG/CEV at (716) 236-3122.

Sincerely

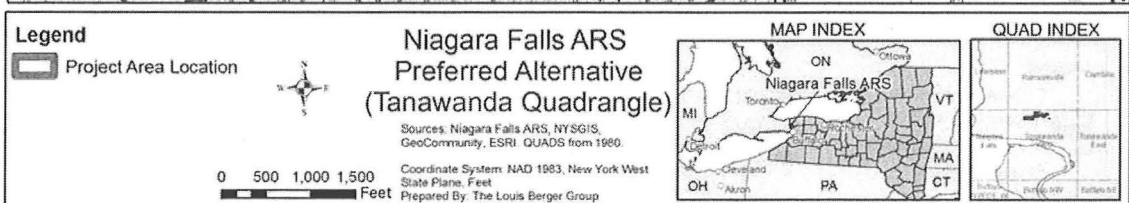
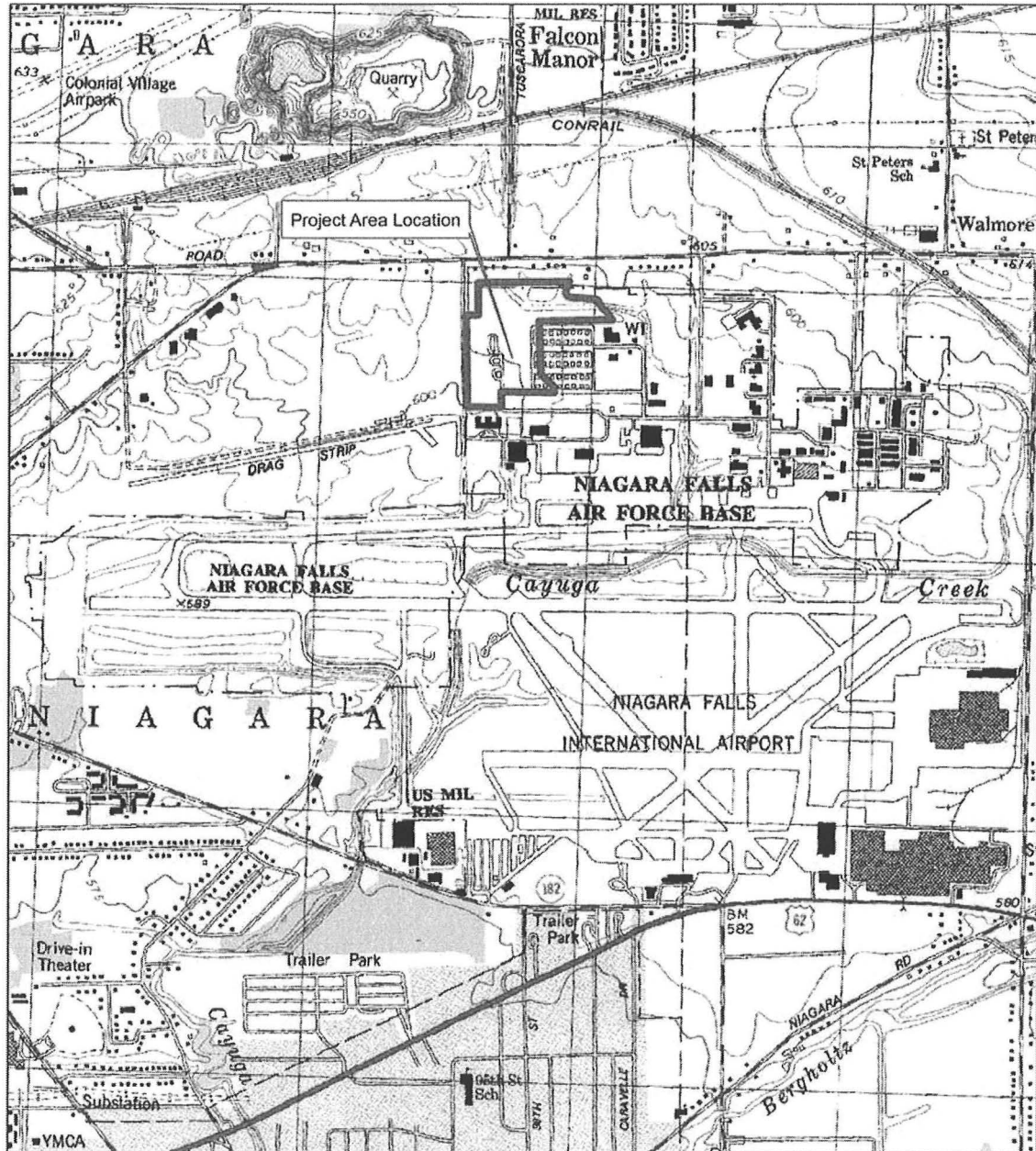
  
DERMOTT F. SMYTH  
Base Civil Engineer

Enclosures:

1. Project Location
2. Site Layout
3. Bldg 960 Survey Form
4. NYSHPO Ltr May 12, 2000
5. Figure 4-14 from Stage 1 Investigation

# Enclosure 1

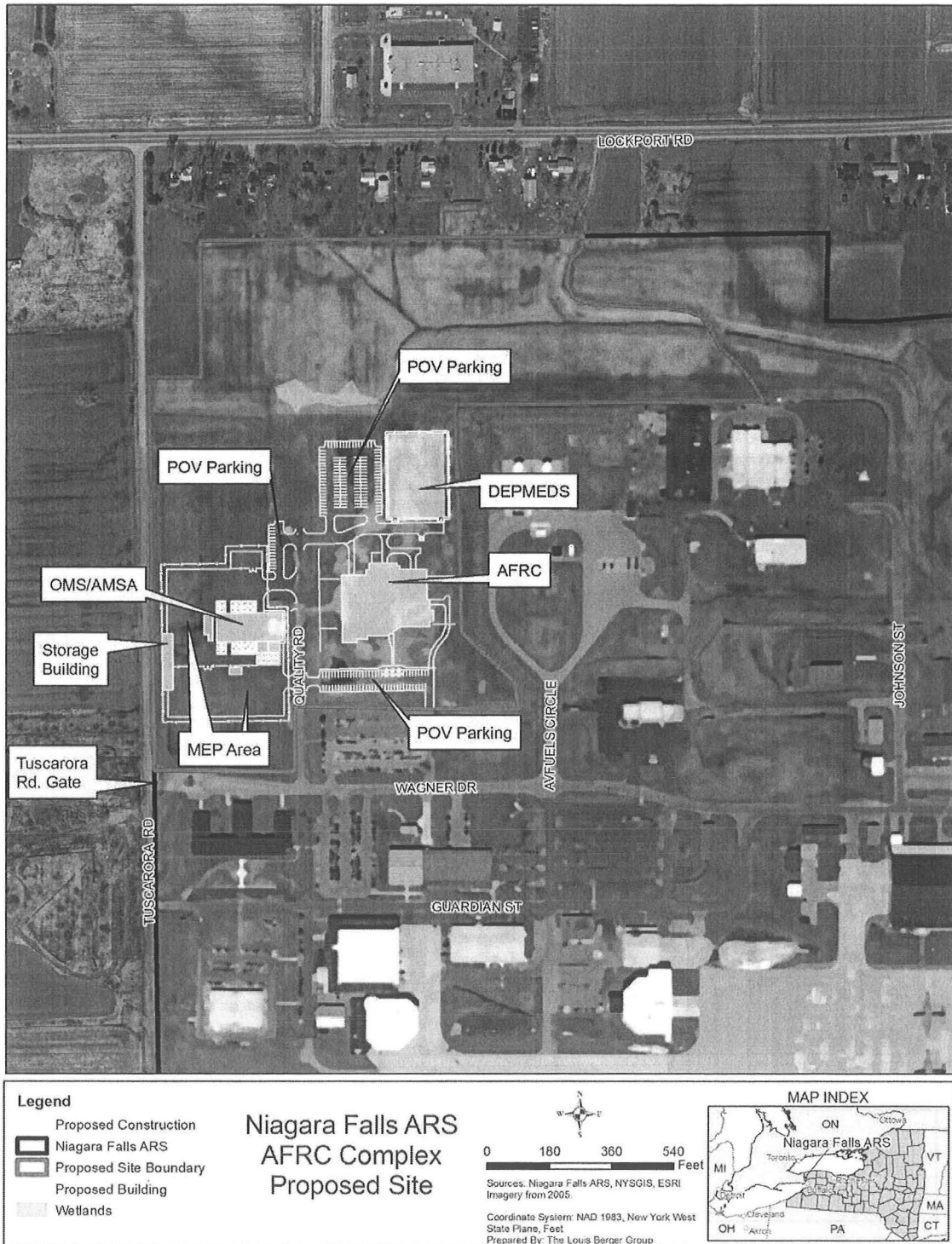
## Project Location for BRAC Proposed Action Alternative— USGS 1:24,000 Scale Topographic Quadrangle






## Enclosure 2

### Proposed AFRC Site Layout – Niagara Falls ARS



# Historic Property Survey Form

Niagara Falls Air Reserve Station, New York

<b>Building Number</b> 960	<b>Original Use</b> Ammo Maintenance Shop	<b>Current Use</b> CATM
<b>Date of Construction</b> 1965	<b>Original Category Code</b> 216-642	<b>Current Category Code</b> 171-476
<b>County:</b> Niagara County	<b>Photo</b> 	
<b>City/Town:</b> Niagara		
<b>Original Command</b> ADC		
<b>Theme</b> Primary Training		

**INTEGRITY**

This property has been significantly altered on the exterior, including the addition of replacement aluminum windows and doors, and an open-air picnic area addition on the North. It no longer possesses integrity of design, materials, or workmanship to demonstrate significance of any criteria for evaluation.

**SIGNIFICANCE**

This property relates primarily to the Sustained Forces Training theme within the Military Aviation historic context. This property is not associated with events that have made a significant contribution to the broad patterns of history (Criteria A); is not associated with the lives of significant persons (Criteria B); does not embody the distinctive characteristics of a type, period, method of construction, or the work of a master, and does not possess high artistic value (Criteria C); and it has not yielded and is not likely to yield information important in history or prehistory (Criteria D).

file 87-2  
34



Bernadette Castro  
Commissioner

**New York State Office of Parks, Recreation and Historic Preservation**  
Historic Preservation Field Services Bureau  
Peebles Island, PO Box 189, Waterford, New York 12188-0189

518-237-8643

May 12, 2000

Dermott F. Smyth  
Base Civil Engineer  
Department of the Air Force  
914 SPTG/CE  
2405 Franklin Drive  
Niagara Falls ARS, New York 14304-5063

Dear Mr. Smyth:

Re: AIR FORCE  
Base Master Plan/Niagara Falls International  
Airport Air Reserve Station  
Wheatfield, Niagara County  
95PR2445

Thank you for requesting the comments of the State Historic Preservation Office (SHPO). We have reviewed the Stage 1 Cultural Resource Investigation reports for the Niagara Falls Air Reserve Station (NFARS) in accordance with Section 106 of the National Historic Preservation Act of 1966 and the relevant implementing regulations.

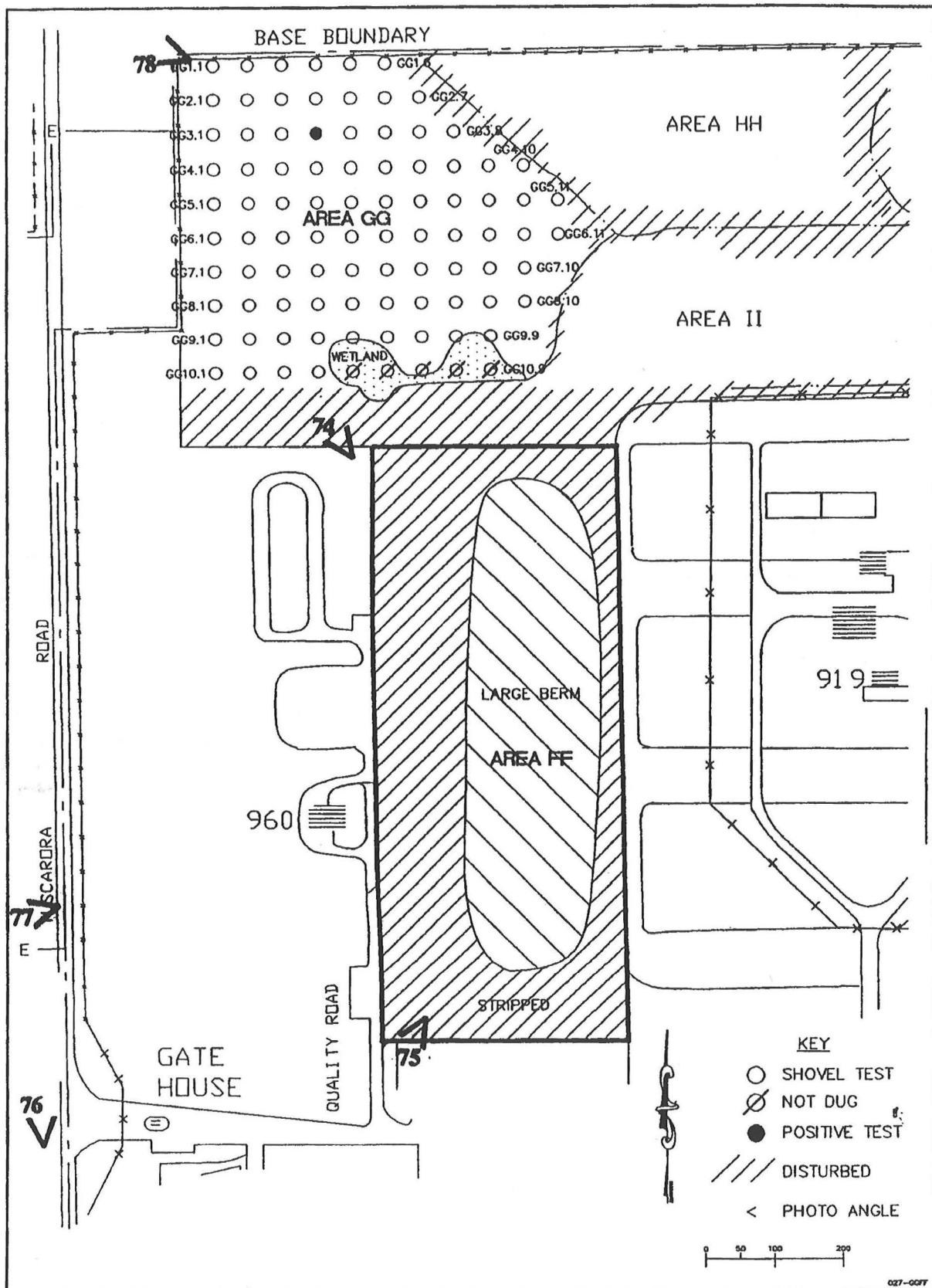
Based upon this review, the SHPO accepts and approves the reports. We concur with the conclusions of the reports that there are no archeological sites at NFARS. Therefore, the SHPO has no concerns that need to be addressed. In addition, future projects at NFARS will not require any additional archeological investigations.

When responding please be sure to refer to the SHPO project review (PR) number noted above. If you have any questions, please feel free to call me at (518) 237-8643 ext. 3255.

Sincerely,

Robert D. Kühn  
Assistant Director

RDK:bsd



**FIGURE 4-14. Map Showing Study Areas FF and GG, Shovel Test Locations, Disturbances and Photo Angles.**



## THE Louis Berger Group, INC.

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### CONVERSATION

Date June 11, 2007 Time 1335

### RECORD

Name: Mark Peckham

Organization: NYSHPO

Phone: 518-237-8643

RE: Interagency correspondence for new AFRC at NFARS

Mr. Peckham returned my call regarding NYSHPO response to April 30, 2007 interagency correspondence from NFARS to NYSHPO requesting confirmation that the proposed AFRC at NFARS would have no significant adverse impacts on archaeological or historical sites at NFARS or the surrounding area.

Mr. Peckham stated that the NYSHPO concurs with the conclusion that the Proposed Action would not have any adverse impacts on any cultural resources and that no further studies are needed. He reiterated that as a result of the findings of the 1998 survey that was conducted, the NYSHPO will not require any further studies for future projects at NFARS. He also stated that for structures that anything of a historic nature has been so altered that it has no historical significance any more.

I mentioned that Jim Mathews at NFARS had not seen the response correspondence from the NYSHPO. Mr. Peckham stated that he would look for it and in response to my request, would fax a copy of the letter to me if he found it.

Written by Spence Smith \_\_\_\_\_

## **APPENDIX B— ECONOMIC IMPACT FORECAST SYSTEM (EIFS) MODEL**



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## **SOCIOECONOMIC IMPACT ASSESSMENT**

Socioeconomic impacts are linked through cause-and-effect relationships. Military payrolls, local procurement of goods and services, and construction projects all contribute to the economic base of the region of influence (ROI). In this regard, the Base Realignment and Closure (BRAC) actions proposed for the Niagara Falls area would have a multiplier effect on the local and regional economy. Under the Proposed Action, direct jobs would be created, generating new income and increasing personal spending. This spending generally creates secondary jobs, increases business volume, and increases revenues for schools and other social services.

### **THE ECONOMIC IMPACT FORECAST SYSTEM**

The U.S. Army, with the assistance of many academic and professional economists and regional scientists, developed the Economic Impact Forecast System (EIFS) to address the economic impacts of actions requiring analysis under the National Environmental Policy Act (NEPA) and to measure their significance. As a result of its designed applicability, and in the interest of uniformity, EIFS is used in NEPA assessments for a number of Army BRAC NEPA documents. The entire system is designed for the scrutiny of a populace affected by the actions being studied. The algorithms in EIFS are simple and easy to understand, but still have firm, defensible bases in regional economic theory.

EIFS was developed under a joint project of the U.S. Army Corps of Engineers (USACE), the U.S. Army Environmental Policy Institute (AEPI), and the Computer and Information Science Department of Clark Atlanta University, Georgia. EIFS is an on-line system, and the EIFS Web application is hosted by the USACE, Mobile District. The system is available to anyone with an approved user-id and password. University staff and the staff of USACE, Mobile District is available to assist with the use of EIFS.

The databases in EIFS are national in scope and cover the approximately 3,700 counties, parishes, and independent cities that are recognized as reporting units by federal agencies. EIFS allows the user to define an economic ROI by identifying the counties, parishes, or cities to be analyzed. Once the ROI is defined, the system aggregates the data, calculates multipliers and other variables used in the various models in EIFS, and prompts the user for forecast input data.

### **THE EIFS MODEL**

The basis of the EIFS analytical capabilities is the calculation of multipliers that are used to estimate the impacts resulting from Army-related changes in local expenditures or employment. In calculating the multipliers, EIFS uses the economic base model approach, which relies on the ratio of total economic activity to basic economic activity. Basic, in this context, is defined as the production or employment engaged to supply goods and services outside the ROI or by federal activities (such as military installations and their employees). According to economic base theory, the ratio of total income to basic income is measurable (as the multiplier) and sufficiently

stable so that future changes in economic activity can be forecast. This technique is especially appropriate for estimating aggregate impacts and makes the economic base model ideal for the EA and EIS process.

The multiplier is interpreted as the total impact on the economy of the region resulting from a unit change in its base sector; for example, a dollar increase in local expenditures due to an expansion of its military installation. EIFS estimates its multipliers using a location quotient approach based on the concentration of industries within the region relative to the industrial concentrations for the nation.

The user inputs into the model the data elements which describe the Army action: the change in expenditures, or dollar volume of the construction project(s); change in civilian or military employment; average annual income of affected civilian or military employees; the percent of civilians expected to relocate due to the U.S. Army's action; and the percent of military living on-post. Once these are entered into the EIFS model, a projection of changes in the local economy is provided. These are projected changes in sales volume, income, employment, and population. These four indicator variables are used to measure and evaluate socioeconomic impacts. Sales volume is the direct and indirect change in local business activity and sales (total retail and wholesale trade sales, total selected service receipts, and value-added by manufacturing). Employment is the total change in local employment due to the proposed action, including not only the direct and secondary changes in local employment, but also those personnel who are initially affected by the military action. Income is the total change in local wages and salaries due to the proposed action, which includes the sum of the direct and indirect wages and salaries, plus the income of the civilian and military personnel affected by the proposed action. Population is the increase or decrease in the local population as a result of the proposed action.

#### THE SIGNIFICANCE OF SOCIOECONOMIC IMPACTS

Once model projections are obtained, the Rational Threshold Value (RTV) profile allows the user to evaluate the significance of the impacts. This analytical tool reviews the historical trends for the defined region and develops measures of local historical fluctuations in sales volume, income, employment, and population. These evaluations identify the positive and negative changes within which a project can affect the local economy without creating a significant impact. The greatest historical changes define the boundaries that provide a basis for comparing an action's impact on the historical fluctuation in a particular area. Specifically, EIFS sets the boundaries by multiplying the maximum historical deviation of the following variables:

		Increase	Decrease
Sales Volume	X	100%	75%
Income	X	100%	67%
Employment	X	100%	67%
Population	X	100%	50%

These boundaries determine the amount of change that will affect an area. The percentage allowances are arbitrary, but sensible. The maximum positive historical fluctuation is allowed with expansion because economic growth is beneficial. While cases of damaging economic growth have been cited, and although the zero-growth concept is being accepted by many local planning groups, military base reductions and closures generally are more injurious to local economics than are expansion.

The major strengths of the RTV are its specificity to the region under analysis and its basis on actual historical data for the region. The EIFS impact model, in combination with the RTV, has proven successful in addressing perceived socioeconomic impacts. The EIFS model and the RTV technique for measuring the intensity of impacts have been reviewed by economic experts and have been deemed theoretically sound.

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## APPENDIX C— AIR QUALITY APPLICABILITY ANALYSIS



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## GENERAL CONFORMITY APPLICABILITY ANALYSIS

This air quality applicability analysis was conducted to identify potential increases or decreases in criteria air pollutant emissions associated with the proposed construction at Niagara Falls Air Reserve Station, New York. The project will occur within a U.S. EPA designated basic (subpart I) non-attainment zone for ozone and is subject to the federal conformity requirements. The purpose of the analysis is to apply the Federal General Conformity Rule established in 40 CFR, Part 93 entitled: *Determining Conformity of Federal Actions to State or Federal Implementation Plans* to the Proposed Action Alternative in order to determine any effect on air quality.

The federal conformity rules were established to ensure that federal activities do not hamper local efforts to control air pollution. In particular, Section 176(c) of the Clean Air Act (CAA) prohibits federal agencies, departments or instrumentalities from engaging in, supporting, licensing, or approving any action, in an area that is in non-attainment of the National Ambient Air Quality Standards (NAAQS), which does not conform to an approved state or federal implementation plan. Therefore, the agency must determine whether or not the project would interfere with the clean air goals in the State Implementation Plan (SIP).

### 1.0 PROJECT DESCRIPTION

The Proposed Action is to construct a new AFRC and associated support facilities at Niagara Falls ARS to support U.S. Army Reserve units and one NYARNG unit relocating from the local area. The proposed AFRC would provide a 600-member training facility with administrative, educational, assembly, library, learning center, vault, weapons simulator, and physical fitness areas for 12 U.S. Army Reserve units and one NYARNG unit. Associated support facilities include an Organizational Maintenance Shop (OMS)/AMSA, an unheated storage building, and a Deployable Medical System (DEPMEDS). The buildings would be of permanent construction with reinforced concrete foundations; concrete floor slabs; structural steel frames; masonry veneer walls; standing seam metal roofs; heating, ventilation, and air conditioning (HVAC) systems; plumbing; mechanical systems; security systems; and electrical systems. The DEPMEDS will provide a 1-acre site with a gravel surface, fencing, lighting, and electrical outlets (U.S. Army, 2006b).

The approximate size of the AFRC and the additional support facilities is 71,720 SF with the OMS/AMSA measuring 17,476 SF. In addition, there would be approximately 12,775 square yards (sy) of paved military equipment parking (MEP) areas and 6,720 sy of paved privately-owned vehicle (POV) parking areas.

### 2.0 METEOROLOGY/CLIMATE

Niagara Falls is located in the vicinity of Lake Ontario and Lake Erie, which results in wide seasonal swings of hot and cold temperatures. The climate is humid and precipitation is moderate and distributed evenly throughout the year, with the exception of a dryer winter. Due to the lake effects, wind flow throughout the year is somewhat high. (MEP EA, 2004)

The average temperature at Niagara Falls is 47.6 degrees Fahrenheit (°F). The area experiences moderately warm summers and long cold winters. Summer temperatures average in the low 70s, with temperatures above 90°F occurring occasionally. Winter temperatures range from lows in the mid 20s to highs in the mid 30s. The average rainfall is approximately 40 inches per year and the average snowfall is 67 inches. (MEP EA, 2004)

### 3.0 CURRENT AMBIENT AIR QUALITY CONDITIONS

The U.S. EPA has classified the area of the proposed action as in basic non-attainment for ozone. NFARS is located in Niagara County, New York.

### 4.0 AIR QUALITY REGULATORY REQUIREMENTS

The U.S. EPA defines ambient air in 40 CFR Part 50 as “that portion of the atmosphere, external to buildings, to which the general public has access.” In compliance with the 1970 Clean Air Act (CAA) and the 1977 and 1990 Clean Air Act Amendments (CAAA), the U.S. EPA has promulgated National Ambient Air Quality Standards (NAAQS). The NAAQS were enacted for the protection of the public health and welfare, allowing for an adequate margin of safety. To date, the EPA has issued NAAQS for six criteria pollutants: carbon monoxide (CO), sulfur dioxide (SO<sub>2</sub>), particles with a diameter less than or equal to a nominal 10 micrometers (PM<sub>10</sub>), ozone (O<sub>3</sub>), nitrogen oxides (NO<sub>x</sub>), and lead (Pb). U.S. EPA promulgated a standard for fine particulates (PM<sub>2.5</sub>) in April 2005; however, PM<sub>2.5</sub> *de minimis* thresholds are not yet finalized. Areas that do not meet NAAQS are called non-attainment areas.

The NAAQS for ozone are in Table C-1.

**Table C-1. National Ambient Air Quality Standards For Ozone**

Pollutant	Federal Standard	New York Standard
Ozone (O <sub>3</sub> )* 8-Hour Average	0.08 ppm	0.08 ppm

\* Federal primary and secondary standards for this pollutant are identical.

Sources: U.S. EPA, 2006; NYSDEC, 2007d

To regulate the emission levels resulting from a project, federal actions located in non-attainment areas are required to demonstrate compliance with the general conformity guidelines established in 40 CFR Part 93 *Determining Conformity of Federal Actions to State or Federal Implementation Plans* (the Rule). The project area is located within a non-attainment area; therefore, a General Conformity Rule applicability analysis is warranted.

Section 93.153 of the Rule sets applicability requirements for projects subject to the Rule through establishment of *de minimis* levels for annual criteria pollutant emissions. These *de minimis* levels are set according to criteria pollutant non-attainment area designations. Projects below the *de minimis* levels are not subject to the Rule. Those at or above the levels are required to perform a conformity analysis as established in the Rule. The *de minimis*

levels apply to direct and indirect sources of emissions that can occur during the construction and operation phases of the action.

Direct emissions are those caused by or initiated by the federal action that occur at the same time and place as the action. Indirect emissions are those caused by the action, but which occur later in time and/or at a distance removed from the action itself, yet are reasonably foreseeable and the federal agency responsible for the action can maintain control as part of the actions program responsibility. Emissions are estimated for the ozone precursor pollutants nitrogen oxides (NO<sub>x</sub>) and volatile organic compounds (VOC). Annual emissions for these compounds were estimated for the project to determine if it would be below or above the *de minimis* levels established in the Rule. The *de minimis* for basic non-attainment areas for ozone in an ozone transport region is 100 tons per year (TPY) for NO<sub>x</sub> and 50 TPY for VOCs

In addition to the evaluation of air emissions against *de minimis* levels, emissions are also evaluated for regional significance. A federal action that does not exceed the threshold emission rates of criteria pollutants may still be subject to a general conformity determination if the direct and indirect emissions from the action exceed ten percent of the total emissions inventory for a particular criteria pollutant in a non-attainment or maintenance area. If the emissions exceed this ten percent threshold, the federal action is considered to be a “regionally significant” activity, and thus, the general conformity rules apply.

## **5.0 CONFORMITY APPLICABILITY ANALYSIS**

This project construction- and operations-related General Conformity analysis was performed for the proposed action at Niagara Falls ARS. This conformity analysis and air emissions evaluation will follow the criteria regulated in 40 CFR Parts 6, 51, and 93, *Determining Conformity of General Federal Actions to State or Federal Implementation Plans; Final Rule* (November 30, 1993).

### **5.1 CONSTRUCTION PHASE EMISSIONS**

Construction emissions would result from the operation of heavy equipment, the commuter vehicle traffic from the construction crew, and the painting of the building structures and parking spaces. The project would utilize a mix of heavy equipment for demolition and construction, mainly associated with preparing the site for the buildings and utility relocation.

#### **5.1.1 Emissions from Heavy Equipment**

Annual emissions were calculated for various types of diesel construction vehicles using model emission rate input for the year 2008 in U.S. EPA’s *Nonroad2005 Emission Inventory Model: Diesel Construction Equipment, Niagara County, New York*. Truck emission levels were calculated using EPA’s *MOBILE6* model for an average temperature of 49 °F. The total annual emissions, in tons per year, were determined for each vehicle based on the number of vehicles used and the number of operating hours per year. It was assumed that construction activities

for the buildings would require two years, beginning in 2008. Construction personnel were assumed to commute an average of 50 miles per day over the construction period.

It was assumed that delivery trucks would travel 20 miles per trip, making three trips a day, for a total of 60 miles a day. The pick-up truck would also travel 20 miles per trip, making five trips a day, for a total of 100 miles a day. During trenching activities, dump trucks would accumulate a total of 85 miles a day, and 34 miles a day during regular construction.

Emissions factors used for construction vehicles are shown in Table C-2.

#### **5.1.1.1 Calculations for Construction Emissions**

Using the emissions factors in Table C-2, construction emissions were calculated for the proposed construction at Niagara Falls ARS. Using the assumptions described above, the emissions in tons of NO<sub>x</sub>, VOC, and PM<sub>10</sub> for construction emissions were calculated for each vehicle type using the appropriate equations displayed in Tables C-3.

**Table C-2. Emissions Factors for Construction Vehicles**

Construction Vehicle Type	Emissions Factors lbs/hr-vehicle	
	NO <sub>x</sub>	VOC
Chipping Machine	1.169	0.119
Front End Loader	3.109	0.219
Chain Saws	0.208	0.029
Excavator	3.372	0.164
Dozer	2.714	0.199
Vibratory Roller	1.580	0.121
Grader	1.642	0.125
Asphalt Paver	1.387	0.106
Steel Wheel Roller	0.988	0.108
Pneumatic Tire Roller	0.988	0.108
Scraper	5.632	0.302
Concrete Pumper Truck	2.941	0.237
Concrete Truck	2.941	0.237
Crane	1.239	0.125
Backhoe	1.545	0.365
Water Tanker*	14.151	0.293
Dump Truck*	14.151	0.293
Pick-Up Truck*	1.012	1.24

Construction Vehicle Type	Emissions Factors lbs/hr-vehicle	
	NO <sub>x</sub>	VOC
Delivery Truck (Medium)*	1.143	0.226
Delivery Truck (Heavy)*	3.804	1.930

\* units are in grams/mile/vehicle

**Table C-3. Equations for Construction Emissions Calculations**

Emission Source	Equation	Sample Calculation
<b>Heavy Equipment Emissions, On-Site Activities</b>	(# of vehicle type) (Emission factor) (Total # of days in operation) (percent usage) (hours/day) (1 ton/2000 lbs) = tons of air emissions	(1 grader) (1.642 lbs/hr/vehicle) (7 days in operation) (100% usage) (8 hours/day) (1 ton/2000 lbs) = <b>0.049 tons of NO<sub>x</sub> of equipment emissions</b>
<b>Construction Crew, Commuting</b>	(# of vehicles) (#miles/day) (#days) (emissions factor grams/mile) (1 lb/453.59 grams) (1 ton/2000 lb) = tons of vehicle emissions	(50 vehicles) (50 miles/day) (480 days) (0.0783 grams/mile/vehicle) (1 lb/453.59 grams) (1 ton/2000 lb) = <b>1.04 tons NO<sub>x</sub> of vehicle emissions</b>

#### 5.1.1.2 Preferred Alternative

Equipment requirements were estimated for the construction activities associated with site preparation for buildings, construction of the parking, and trenching for utilities. Table C-4 provides the equipment assumptions and resultant total equipment emissions for the Preferred Alternative.

Annual emissions, assuming uniform construction over the two-year period, would equal one-half the values in Table C-4.

**Table C-4. Total Emissions for Construction – Preferred Alternative**

Construction Vehicle Type	Total Days of Operation	Total Emissions - Tons	
		NO <sub>x</sub>	VOC
Chipping Machine	5	0.022	0.002
Front End Loader	16	0.193	0.014
Chain Saws	10	0.008	0.001
Excavator	14	0.186	0.009
Dozer	11	0.125	0.009
Pneumatic Tire Roller	1	0.003	0.000
Steel Wheel Roller	2	0.006	0.001
Asphalt Paver	1	0.004	0.000



Construction Vehicle Type	Total Days of Operation	Total Emissions - Tons	
		NO <sub>x</sub>	VOC
Vibratory Roller	22	0.142	0.011
Grader	14	0.092	0.007
Scraper	39	0.861	0.046
Concrete Pumper Truck	31	0.36	0.03
Concrete Truck	8	0.09	0.01
Crane	23	0.11	0.01
Backhoe	69	0.42	0.10
Water Tanker	3	0.001	0.000
Dump Truck	56	0.059	0.001
Pick-Up Truck	160	0.018	0.022
Delivery Truck (Medium)	5	0.000	0.000
Delivery Truck (Heavy)	23	0.006	0.003
<b>Total Emissions</b>		<b>2.722</b>	<b>0.275</b>

#### 5.1.2 Emissions from Construction Crew Workers

Emissions from construction personnel traffic were calculated using the EPA's *MOBILE6*. It is assumed that the construction crew would consist of approximately 24,000 worker-days, which equates to an average of 50 workers per day for 480 days. For a conservative analysis, it was assumed each person would drive to the site and that the average number of workers will drive approximately 25 miles each day. Based on *MOBILE6*, the emission factor for NO<sub>x</sub> is 0.783 grams/mile/vehicle and VOC is 1.135 grams/mile/vehicle for the average fleet in Niagara County, New York. Resultant total emissions associated with the commuter vehicles from the construction crew are approximately 1.04 tons of NO<sub>x</sub> and 1.50 tons of VOC.

#### 5.1.3 Emissions from Painting Activities

For painting building structures, it was assumed that water-based latex paint would be used with a VOC content of one pound per gallon and one gallon of paint covers approximately 300 square feet. Three coats of paint will be applied (one primer and two finish) to approximately 133,794 square feet of interior surfaces. These values assume 50-percent of the interior space consists of rooms with drop ceilings and a ratio of walls needing paint to floor space of 3 to 1, with the remainder of the space (50-percent) consisting of open cubicle space not requiring paint. Based on these assumptions, approximately 1,338 gallons of paint are needed for the interior wall surfaces under the Preferred Alternative. Total interior painting for buildings constructed over the course of the two-year construction period create approximate VOC emissions of 0.67 tons.

Emissions from parking spaces painting were based on four-inch wide stripes. It was assumed that the average parking space is 9 feet wide by 19 feet long and every two parking spaces share a common line. Approximately 9.24 square feet would be painted for every parking space. For parking spaces, it was assumed that alkyd paint would be used with a VOC content of three pounds per gallon and one gallon of paint covers approximately 200 square feet. One coat of paint would be applied to the parking surfaces. Based on the construction of 192 spaces, approximate VOC emissions for painting parking spaces would be 0.01 tons.

#### 5.1.4 Summary of Construction Emissions

After emissions analysis was performed for all aspects of construction, the totals were added to determine the combined construction emissions. Table C-5 displays a summary of the results compared to the *de minimis* values. These emissions represent the emissions expected throughout the entire two-year construction period.

**Table C-5. Total Annual Emissions from Construction**

Construction Activity	Total Emissions (TPY)		De minimis values –TPY	
	NO <sub>x</sub>	VOC	NO <sub>x</sub>	VOC
Use of Heavy Equipment (on-site construction)	2.50	0.26	100	50
Construction Crew Workers	1.04	1.50		
Painting	NA	0.68		
<b>Total Emissions from Construction</b>	<b>3.53</b>	<b>2.44</b>		

## 5.2 OPERATIONAL EMISSIONS

### 5.2.1 Heating Source Emissions

Operational heating requirements are based on the assumption that administrative buildings use 50,000 British Thermal Units (BTUs) annually per square foot of space. Based on Niagara Falls ARS's current utility infrastructure, it is assumed the new buildings will be fueled by natural gas at an 80-percent efficiency and a consumption rate of 1,027 BTU/standard cubic foot (SCF) of gas would require 61 SCF/SF per year to heat admin space.

Water heating is assumed to add 13-percent in energy demand for administrative space, which is the ratio of water heating to space heating reported for office buildings and warehouses in the Energy Information Administration report *Energy End-Use Intensities in Commercial Buildings*.

The Preferred Alternative space and water heating for 89,196 SF of administrative space and 43,000 SF of warehouse space requires annually:

- $(89,196 \text{ SF})(61 \text{ SCF/SF})(1.13) = 6.15 \text{ million SCF natural gas}$

For the natural gas analysis, operational heating emissions are based on the EPA's *AP-42 Fifth Edition, Compilation of Air Pollution Emission Factors Volume I, Chapter 1: Stationary Sources, Supplement D* (EPA, 1998). The new buildings to be constructed on NFARS are assumed to be heated by small boilers that operate at less than 100 million Btu per hour. Therefore, the emission factors for NO<sub>x</sub> and VOC were determined for the facility boilers and water heaters using the EPA's natural gas combustion supplement mentioned above. For NO<sub>x</sub> emissions, the facility boilers emit 100 lb NO<sub>x</sub> /10<sup>6</sup> SCF of natural gas. The emission rate for VOC is 5.5 lb/10<sup>6</sup> SCF of natural gas. Water heaters are assumed to use natural gas and add 13-percent to natural gas demand in administrative space.

For the Preferred Alternative, the annual natural gas emissions of NO<sub>x</sub> and VOC were calculated to be 0.307 TPY and 0.016 TPY, respectively, at full operation.

### 5.2.2 Vehicle Emissions from Daily Commuters

Vehicle emissions from commuter vehicles are based on the *MOBILE6* air modeling program, estimating the emissions per vehicle per mile traveled. The *MOBILE6* modeling program takes into account the vehicle age, average speed, and vehicle type to create average emission factors to be used in an overall analysis. The analysis assumed that the annual average temperature is 49° F. Based on this assumption, the emissions factors for NO<sub>x</sub> and VOC from average vehicles are provided in Table C-6.

**Table C-6. Emission Factors for Commuter Vehicles**

Pollutant	Emissions Factor - grams/mile/vehicle
NO <sub>x</sub>	0.783
VOC	1.135

The annual emissions in tons per year of NO<sub>x</sub> and VOC for full time commuter emissions were calculated using the appropriate equations displayed in Table C-7.

**Table C-7. Equations for Operations Emissions Calculation**

Emission Source	Equation	Sample Calculation
<b>Operations, Commuters</b>	$(\# \text{ of vehicles}) (\# \text{ of trips/day}) (\# \text{ miles/trip})$ $(\# \text{ days/year}) = \# \text{ miles/year}$ $(\# \text{ miles/year}) (\text{emissions factor grams/mile}) (1 \text{ lb}/453.59 \text{ grams}) (1 \text{ ton}/2000 \text{ lb}) = \text{TPY of Vehicle Emissions}$	$(54 \text{ vehicles}) (2 \text{ trips/day}) (7 \text{ miles/trip}) (240 \text{ days/year}) (0.783 \text{ g/mile/vehicle}) (1 \text{ lb}/453.59 \text{ grams}) (1 \text{ ton}/2000 \text{ lbs}) = 0.13 \text{ TPY NO}_x$

For the analysis, it is assumed that there will be 54 full time employees traveling to and from NFARS daily. These employees previously commuted to a location a maximum of 7 miles from the new AFRC. Since the

commuters are transferring from within the same airshed, it is assumed that each will only commute a maximum additional 14 miles daily. For the reservists, it is assumed that each reservist would travel to the site 3 times a month and then an additional two full weeks, once a year. These assumptions result in the annual commute of 53 days per year per reservist. The same assumptions for distance traveled (14 miles daily) is applied. Based on these assumptions, the commuter vehicle emissions are shown in Table C-8.

**Table C-8. Annual Emissions from Daily Vehicle Traffic**

	Total Annual Emissions – TPY	
	NO <sub>x</sub>	VOC
<b>Full Time</b>	0.130	0.189
<b>Reservists</b>	0.346	0.502
<b>TOTAL</b>	0.476	0.691

### 5.2.3 Summary of Operation Emissions

Operational emissions include emissions from heating the building space and water, and emissions from employee traffic. Table C-9 combines all operational emissions.

**Table C-9. Total Emissions from Operations**

Operational Activity	Total Annual Emissions –TPY	
	NO <sub>x</sub>	VOC
Space and Water Heating	0.307	0.016
Commuter Traffic	0.479	0.691
<b>Total Emissions from Operations</b>	<b>0.784</b>	<b>0.708</b>

## 5.3 REGIONAL SIGNIFICANCE

Air emissions were also evaluated to determine regional significance. The State Implementation Plan (SIP) for Niagara County is currently in production. As a result, the emissions budgets for NO<sub>x</sub> and VOC for the ozone season are not yet available (Sliwinski, 2007). However, given the small amount of emissions that would be produced under the Proposed Action, and the fact that the majority of emissions would be construction-related and short-term in nature, it is not anticipated that they would make up 10% or more of the available emissions inventory when the SIP for Niagara County is finalized. Therefore, it is anticipated that the Proposed Action would not be regionally significant.

## 5.4 OVERALL RESULTS

Table C-10 summarizes the total emissions associated with the construction and operation phases of the Proposed Action. Construction related emissions would be temporary and only occur during the 24-month development period for all buildings; however, a conservative approach was initially employed in the applicability analysis to assure that construction scheduling would not result in higher levels of emissions than predicted. The analysis first assumed that the construction emissions for all of the buildings would occur concurrently over the same one-year period. These results were further added to estimated data for one year of operations, bounding the potential emissions that might result for any overlap between construction and operations emissions.

**Table C-10. Summary of Annual Emissions**

Activity	Construction Emissions (TPY)		Operation Emissions (TPY)		Combined Emissions (TPY)	
	NO <sub>x</sub>	VOC	NO <sub>x</sub>	VOC	NO <sub>x</sub>	VOC
Heavy Equipment (building/parking)	2.50	0.26			2.50	0.26
Construction Crew Commuting Vehicles	1.04	1.50			1.04	1.50
Painting	NA	0.68			NA	0.68
Stationary Heating Unit (boiler and water heater)			0.307	0.016	0.307	0.016
Daily Commuter Traffic			0.476	0.691	0.476	0.691
<b>Totals</b>					<b>4.313</b>	<b>3.147</b>

The results in Table C-10 show that the emissions associated with constructing and operating the proposed facilities, when compared to the *de minimis* values for this basic ozone non-attainment area, fall well below the *de minimis* levels of 100 TPY for NO<sub>x</sub> and 50 TPY for VOCs even under the initial conservative assumptions that were employed. As a result, the Proposed Action is not subject to the General Conformity Rule requirements.

**APPENDIX D – DRAFT AIR QUALITY  
RECORD OF NON-APPLICABILITY (RONA)**

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## GENERAL CONFORMITY – RECORD OF NON-APPLICABILITY

Project/Action

Name: Implementation of BRAC 05 Realignment at Niagara Falls Air Reserve Station, NY

Project/Action

Point of Contact: Dermott F. Smyth  
Base Civil Engineer  
Telephone: 716-236-3103

Begin Date: September 23, 2005

End Date: September 15, 2011

General Conformity under the Clean Air Act, Section 176 has been evaluated for the project described above according to the requirements of 40 CFR 93, Subpart B. The General Conformity Rule applies to federal actions occurring in regions designated as being in non-attainment for the NAAQS or attainment areas subject to maintenance plans (maintenance areas). Threshold (*de minimis*) rates of emissions have been established for federal actions with the potential to have significant air quality impacts. If a project/action located in an area designated as non-attainment exceeds these *de minimis* levels, a general conformity analysis is required. Niagara County is designated as a basic ozone (8-hour) non-attainment area in an ozone transport region, thus the NO<sub>x</sub> and VOC thresholds apply.

A General Conformity Analysis of this project/action is not required because:

Total direct and indirect emissions from this project/action have been estimated at:

NO<sub>x</sub>: 4.313 tons; VOC: 3.147 tons

and are below the *de minimis* levels established in 40 CFR 93.153 (b) of:

NO<sub>x</sub>: 100 tons; VOC: 50 tons;

Furthermore, the project/action is not considered regionally significant under 40 CFR 93.153 (i). Niagara County is in attainment for criteria pollutants PM<sub>10</sub>, PM<sub>2.5</sub>, CO, SO<sub>2</sub> and Pb and therefore these pollutants are not subject to conformity review.

Supporting documentation and emissions estimates can be found in Section 4.4 and Appendix C of the Environmental Assessment document.



Reinhard L. Schmidt  
Colonel, U.S. Air Force Reserve  
914th Airlift Wing  
Commander

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